"The **first things to go**... and the last to come back... would be cars, trucks, buses..."

December 4, 1961

RAILWAY AGE WEEKLY

U.S. SURVIVAL AND THE RAILROADS

...in economic war

...in limited war

...in nuclear war

A SPECIAL REPORT TO THE U.S. CONGRESS

R COMP
EDITORIAL DEPT
UNIV MICROFILMS INC
313 N FIRST ST
ANN ARBOR MICH

A Record Breaker!

The Buffalo Single Disc Brake-X

A simple mechanical off-wheel brake designed to last the life of the freight car.

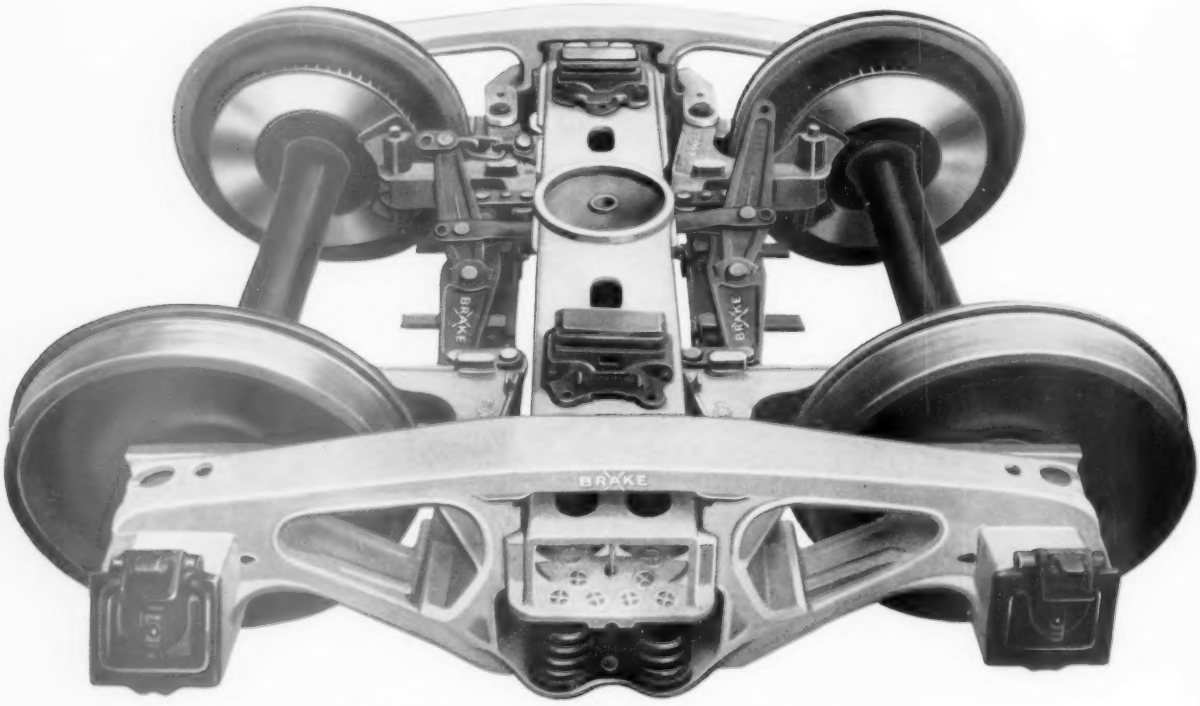
It is not unusual for a freight car to run more than a quarter of a million miles on trucks equipped with Buffalo Single Disc Brake-X without incurring any expense other than brake block renewals.

Improved truck performance is assured, as the truck is always square. Side frames are held parallel at all times, greatly reducing column guide and center plate wear.

Applying the braking force through the disc eliminates brake chatter and spreading of the axles associated with tread brakes, assuring improved journal bearing life and practically eliminating wheel tread and flange wear.

The proven economies being derived from the application of Buffalo Single Disc Brake-X should be recognized in preparing your base specification for high mileage, high speed, hot shot cars.

A word to the wise is sufficient. Send us your inquiries now.



BRAKE X — A mechanically operated single disc freight car brake now in use on 197 cars in interchange service in United States and Canada.

BUFFALO BRAKE BEAM COMPANY

NEW YORK • BUFFALO • HAMILTON, ONT

U.S. SURVIVAL AND THE RAILROADS

3 QUESTIONS RIDE THE RAILS TODAY

A train is the most efficient carrier ever developed!

1 **WHY ARE THE AMERICAN RAILROADS FAILING WHILE THE RAILROADS OF OTHER NATIONS ARE GROWING AND EXPANDING?**

Over the past 15 years, it has been proven by the major railroads of 18 nations that rubber cushioning beneath their rails has reduced maintenance and damage costs by 70 percent!

2 **WHY HAVEN'T THE AMERICAN RAILROADS MADE USE OF THIS ENGINEERING TECHNOLOGY TO CURE THEIR TREMENDOUS MAINTENANCE AND CARGO DAMAGE EXPENSE WHICH COSTS THEM ANNUALLY AS MUCH AS 50 PERCENT OF THEIR TOTAL GROSS INCOME?**

To maintain an adequate defense and a stabilized national economy without railroads, no nation can hope to survive.

3 **WILL THE FEDERAL GOVERNMENT PUT THE RAILROADS BACK IN BUSINESS, OR WILL IT CONTINUE TO PUT RAILS AND THE NATION IN PERIL BY SUBSIDIZING ALL OTHER FORMS OF TRANSPORTATION?**

RUBBER CUSHIONING UNDER THE RAIL PROVIDES - - - -

the TECHNOLOGY . . .
That has reduced general maintenance costs by 70 percent!

the TECHNOLOGY . . .
That has produced the fastest track in the world!

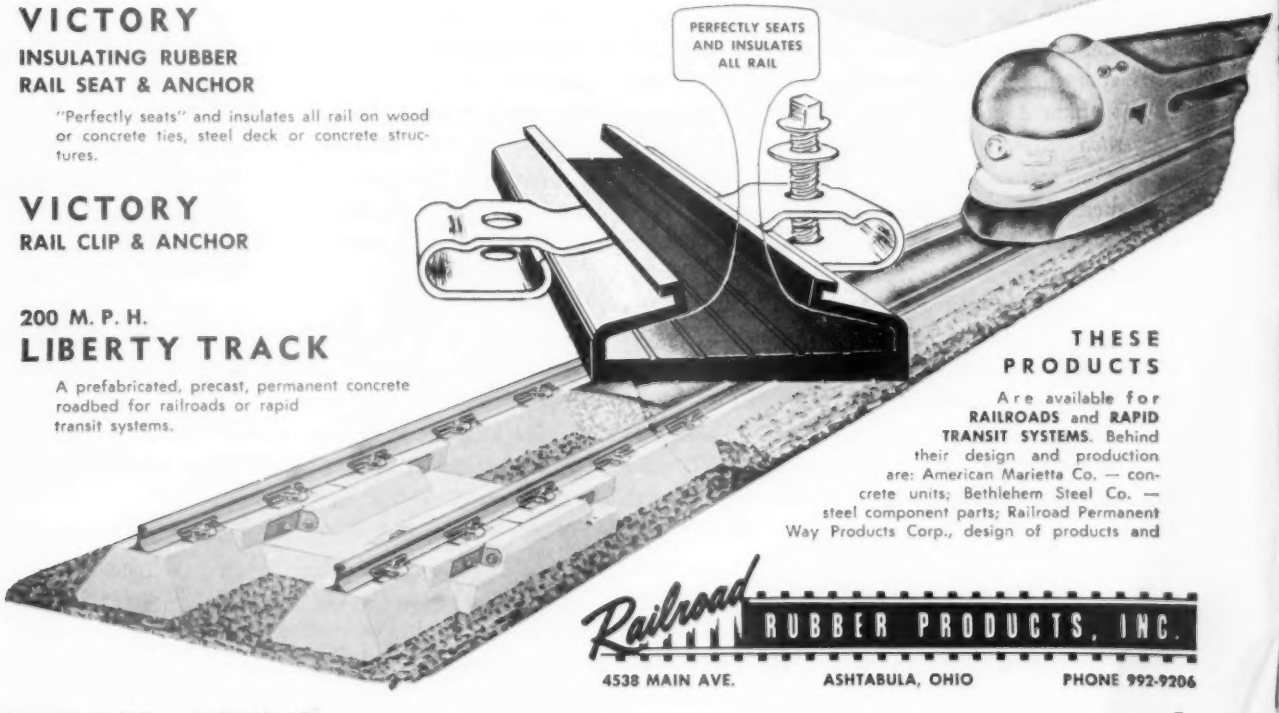
the TECHNOLOGY . . .
That is responsible for the growing, expanding railroads today in 18 nations around the world!

this is the TECHNOLOGY .
That has brought the inherent efficiency of the steel wheel on the steel rail to its greatest perfection!

VICTORY
INSULATING RUBBER RAIL SEAT & ANCHOR
"Perfectly seats" and insulates all rail on wood or concrete ties, steel deck or concrete structures.

VICTORY
RAIL CLIP & ANCHOR

200 M. P. H.
LIBERTY TRACK
A prefabricated, precast, permanent concrete roadbed for railroads or rapid transit systems.



THESE PRODUCTS
Are available for **RAILROADS** and **RAPID TRANSIT SYSTEMS.** Behind their design and production are: American Marietta Co. — concrete units; Bethlehem Steel Co. — steel component parts; Railroad Permanent Way Products Corp., design of products and

Railroad RUBBER PRODUCTS, INC.
4538 MAIN AVE. ASHTABULA, OHIO PHONE 992-9206

Why railroads are a step ahead of the entire transportation industry

For years now, many of us have been bemoaning legislative inequities that force the railroad industry to buy, maintain, and pay high taxes on private rights-of-way, while competition operates on open routes that are virtually government subsidized. *Maybe we've been bemoaning a situation that actually puts us a step ahead of competition —if we will only take the step.*

Nonsense? Not a bit, because now it is more certain than ever that in the years ahead, the industry with the biggest competitive advantage is the industry with the best possibility for *automation.* And private rights-of-way give railroads the unique opportunity to automate completely. Rights-of-way comprise an exclusive lane for train traffic under direct control of the railroad. They follow a set geographical pattern where speed limits can be established, switching locations defined, and traffic patterns scheduled. The technology exists right now to make train traffic over rights-of-way as completely automatic and safe as automatic elevators.

Union Switch & Signal's concept for the development of automatic railroads falls into four major steps: **1.** Continue the extension of remote control from one centralized point—CTC. **2.** Add cab signal and train control equipment for safe operation without wayside signals. **3.** Add automatic dispatching equipment or other decision making devices which size up normal traffic problems and automatically make the proper decision to direct the best possible movement of each train, subject to basic safety controls. **4.** Add automatic train control servo—the mechanism on the train which follows the commands dictated by decision making devices.

Development of the completely automatic train is possible *now*, but it does not have to be accomplished in one move. It can be accomplished in stages, with each completed stage bringing its own immediate return in greater operating efficiency.

Thinking about stepping ahead? Get in touch with Union Switch & Signal for a thorough investigation of the future of railroad automation.

"Pioneers in Push-Button Science"

UNION SWITCH & SIGNAL

DIVISION OF WESTINGHOUSE AIR BRAKE COMPANY

SWISSVALE, PENNSYLVANIA

NEW YORK ... PITTSBURGH ... CHICAGO ... SAN FRANCISCO

RAILWAY AGE

WEEK AT A GLANCE

December 4, 1961 • Vol. 151 No. 23

U. S. SURVIVAL AND THE RAILROADS

This is neither science fiction nor horror story. This is the true story of the deadly transportation trap we're building for ourselves and preparing to walk into. The truth of the story is self-evident.

How to go under in 3 easy lessons

Our modern industrialized society cannot survive without a strong system of low-cost mass transportation—the kind railroads can provide but aren't allowed to p.32

In World War II, where would we have been without our railroads?

Railroads carried the load in World War II. Even the depression-weakened plant available in 1940 could, and did, expand capacity unbelievably. It kept America mobile p.34

A train is the most efficient carrier ever developed...

When fuel and manpower gets scarce, the efficiency of rail transport pays dividends fast. No other type of transportation can match rail performance p.36

...Yet we've been stripping the U.S. of its railroad plant

Proven reliability in emergencies seems soon forgotten. Years of adverse treatment and low volume have forced railroads to trim car fleets, even rip up some trackage p.37

Economic War—the kind we're already in

America is barely holding its own in the race for world markets. Wasteful transport at home makes the job harder by keeping prices of U.S. goods higher than need be. p.38

Limited War—the kind we're arming for

U.S. transport, over-abundant in peacetime, could be critically scarce with any sudden rise in defense needs. A failure then would be disastrous. p.40

Nuclear War—the kind that could transform us

Nuclear attack could break America into isolated pieces. Unless these segments are connected quickly the nation we know would cease to exist. p.42

The national survival kit we need today

America today needs all the strength she can muster. Yet her transport resources have obvious flaws. Congress should begin work on these at once. p.44

Railway Age, established in 1856, is indexed by the Business Periodicals Index, the Engineering Index Service and the Public Affairs Information Service. Name registered in U.S. Patent Office and Trade Mark Office in Canada. Published weekly by the Simmons-Boardman Publishing Corporation at 440 Boston Post Road, Orange Conn. Second-class postage paid at the Post Office at Orange, Conn. James G. Lyne, chairman of the board; Arthur J. McGinnis, president and treasurer; Duane C. Salisbury, executive vice president; George Dusenbury, vice president and editorial and promotion director; Robert G. Lewis, Joe W. Kizzia, M. H. Dick, M. J. Figa, vice presidents.

till you have the complete dope on these vastly important improvements that make the 1962 JACKSON TRACK MAINTAINER more than ever the most advantageous machine of its kind:

HOLD EVERYTHING...

FASTER PENETRATION . . . FASTER WORK-HEAD ACTION . . . FASTER INDEXING . . . FULL ELECTRIC OPERATION WITH PUSH-BUTTON CONTROL . . . GREATLY INCREASED VERTICAL AND HORIZONTAL VIBRATORY FORCES . . . MOTOR AND GENERATOR PROTECTION AGAINST SHORT CIRCUITS, SINGLE-PHASING AND LOW VOLTAGE . . . FASTER, MORE POSITIVE BRAKING.

JACKSON VIBRATORS, INC.
LUDINGTON, MICHIGAN

WRITE, WIRE OR PHONE FOR COMPLETE INFORMATION

RAILWAY AGE

WEEK AT A GLANCE

Rail earnings slide toward 15-year low

Present estimates are that net income of Class I roads this year will total no more than $350 million—lowest since 1946 .....p.10

Ramps plus cranes make yard flexible

The Pennsylvania has just completed a major expansion of its Kearny, N.J., TrucTrain facility, which the PRR calls the world's busiest piggyback terminal p.82

Grade-crossing advisory group proposed

As envisioned by an ICC officer, the government-industry group would have official status. It would organize and direct an accident-prevention program p.122

MP rebuilds passenger fleet

President Downing B. Jenks says a three-year program will rebuild "from trucks to roof" every car in the MoPac passenger fleet p.123

RRs renew war on 'excess crew' laws

Carriers operating in New York will press in 1962 for repeal of laws which they claim result in the waste of over $12 million a year p.124

'Fully distributed nonsense'

The Southern Railway's senior transportation analyst gives cogent reasons why fully distributed costs "should never be used for railroad pricing decisions" p.125

The Action Page—'Soon' may be too late

This nation's ability to survive is directly related to the health of its railroads. They must be permitted—now—to compete freely and equitably p.128

Short and Significant

Annual savings 'close to $50 million'...

would be generated by an Illinois Central-Missouri Pacific merger, IC President Wayne Johnston said. New meetings between the two roads will be held in the near future.

Departments

Current Publications 109
Current Railroad Questions .. 51
Dividends Declared 105
Freight Carloadings 121
Freight Operating Statistics .. 52
Letters from Readers 114
New Equipment 121
New Products Report 111
Operation Speed-Up 82
People in the News 103
Railroading After Hours 97
Railway Market 121
Supply Trade 105
The Action Page 128
Watching Washington 122
You Ought to Know 126

Editorial Staff

• **Editorial and Executive Offices**
New York 7, 30 Church St.

JAMES G. LYNE, Editor
ROBERT G. LEWIS, Publisher
JOE W. KIZZIA, Executive Editor
Managing Editor.....Fred C. Miles
News Editor.....Luther S. Miller
Traffic-Transportation.....G. C. Hudson
Mechanical
C. L. Combes F. N. Houser, Jr.
Signaling & Communications
Robert W. McKnight Robert J. Barber
Associate Editors
Rod Craib Harry M. Grayson, Jr.
Librarian.....Edith C. Stone
Editorial Assistant.....June Meyer
Art Director.....Russell F. Rypsam
Design and Layout.....Joel Petrower
Director of Research.....J. W. Milliken
Production Manager.....Joseph J. Menkes
Manager, Contract Dept....Elsie M. Pritchett

• **Chicago 3, 79 West Monroe St.**
Western Editor.....B. C. Walters
Transportation Editor.....William V. Tuite
Mechanical.....Norman E. Gillespie
Engineering.....M. H. Dick
R. E. Dove E. W. Hodgkins, Jr.
Purchases & Stores..Bert Enos, Richard Stahl
Editorial Assistant.....Wanda Brown

• **Washington 4, National Press Bldg.**
Washington Editor.....Walter J. Taft

• **The Hague, Netherlands, Lange Poten 29**
International Editor.....Gordon Huffines

MINER®

CLASS A-22-XL

FRICTION

DRAFT GEAR

MINER®

CLASS RF-333

DRAFT GEAR

FOR EFFICIENT AND LASTING PERFORMANCE
—AND UNEQUALED ECONOMY

W. H. MINER, INC. CHICAGO

OFFICE OF FOREIGN OPERATIONS

1212 Pennsylvania Building 425 Thirteenth St., N.W. Washington 4, D.C., U.S.A.

WEEK AT A GLANCE

Dominion Foundries & Steel, Ltd., . . .

of Hamilton, Ont., proposes to acquire National Steel Car Corp., also of Hamilton, through an exchange of stock. National manufactures railway cars.

The West Virginia legislature . . .

expects to get a recommendation from Governor Barron in January to grant rights of eminent domain to a proposed coal pipeline to the East Coast.

Pennsylvania declared a dividend . . .

of 25 cents a share last week, now has an unbroken record of 114 years of dividend payments —longest of any company on the New York Stock Exchange.

Permission to issue bonds . . .

to finance the purchase of 1,000 new subway cars costing $125 million is sought by New York City in a bill prefiled for consideration by the 1962 Legislature. (See page 121).

Opposition to the GN-NP-CB&Q-SP&S merger plan . . .

will be heard when ICC Examiner Robert H. Murphy reconvenes the hearing Dec. 5 in Minneapolis for cross examination of supporting witnesses.

Additional job-freeze notices . . .

are being served by the Telegraphers on a number of railroads. ORT says they're similar to notices which resulted in an ORT-SP job-stabilization agreement (RA, Nov. 6, p. 9).

Intercity truck tonnage . . .

during the first nine months of 1961 ran slightly (.05%) above the comparable 1960 period, according to American Trucking Associations.

Current Statistics

Operating revenues	
9 mos., 1961	$6,772,848,568
9 mos., 1960	7,212,974,820
Operating expenses	
9 mos., 1961	5,429,147,181
9 mos., 1960	5,724,682,754
Taxes	
9 mos., 1961	734,157,037
9 mos., 1960	781,660,279
Net railway operating income	
9 mos., 1961	316,939,846
9 mos., 1960	433,542,127
Net income estimated	
9 mos., 1961	182,000,000
9 mos., 1960	304,000,000
Carloadings revenue freight	
46 wks., 1961	25,479,067
46 wks., 1960	27,569,348
Freight cars on order	
Nov. 1, 1961	10,297
Nov. 1, 1960	22,900
Freight cars delivered	
10 mos., 1961	27,046
10 mos., 1960	48,351

Advertising Sales Department

Duane C. Salisbury—director of sales

New York 7, N. Y., 30 Church St., WOrth 4-3060
J. S. Vreeland—vice president; F. T. Baker—district manager; W. A. Cubbage

Chicago 3, Ill., 79 W. Monroe St., RAndolph 6-0794
J. R. Thompson—vice president; K. F. Sheeran
H. H. Carey

Cleveland 15, Ohio, 1501 Euclid Ave., MAin 1-4455
H. H. Melville—vice president; C. J. Fisher—district manager

Pittsburgh 19, Pa., Suite 203, Carlton House GRant 1-8186
C. J. Fisher—regional vice president

Atlanta 9, Ga., 22 Eighth St., N. E., TRinity 2-6720—J. S. Crane

Dallas 19, Tex., 3915 Lemmon Ave., LAkeside 1-2322—Joseph Sanders

Los Angeles 17, Cal., 1336 Wilshire Blvd. HUbbard 3-8414—Fred Klaner, Jr.

San Francisco 11, Cal., 916 Kearney St. GArfield 1-7004—Lewis A. Vogler

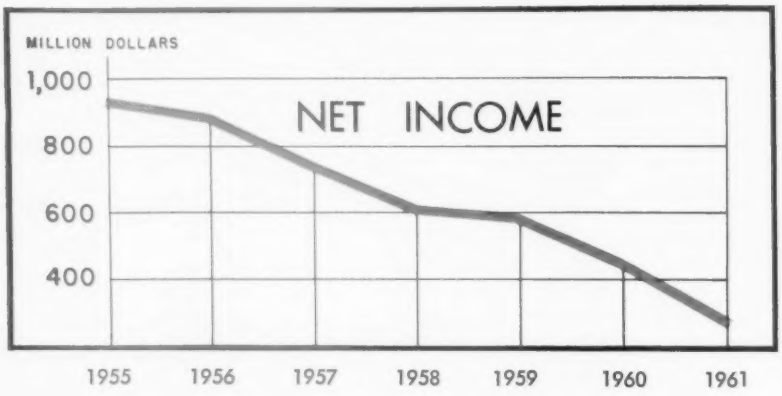
Portland 5, Ore., Terminal Sales Bldg., CApitol 7-4993—Peter W. Klaner

London S. W. 1, England
TRafalgar 6318
67/68 Jermyn St., St. James's
Max F. Holsinger; R. N. Lees; A. T. Chapman-Purchas

Harrogate, Yorkshire, England
11 Tewit Well Road
Harrogate 69212—P.W.B. King

Dusseldorf, Germany
Huttenstrasse 17
Max F. Holsinger; G. W. Rohde; E. Hillerbrand

Railroad employees' subscription rate: in U. S. possessions, Canada and Mexico, $4 one year, $6 two years, payable in advance and postage paid. To railroad employees elsewhere in the western hemisphere, $10 a year. In other countries, $15 a year. Single copies 60¢ except special issues. Address all subscriptions, changes of address and correspondence concerning them to: Subscription Dept., Railway Age, Emmett St., Bristol, Conn.
Change of address should reach us three weeks in advance of next issue date. Send old address with new, enclosing, if possible, your address label. Post Office will not forward copies unless you provide extra postage.
Circulation Dept.: John E. Rogers, Circulation Manager, 30 Church St., New York 7, N. Y.
POSTMASTER—SEND FORM 3579 to EMMETT ST., BRISTOL, CONN.
Printed at the Wilson H. Lee Co., Orange, Conn.



Rail Earnings Slide Toward 15-Year Low

► **The Story at a Glance: As 1961 draws to a close, railroad profits are skidding toward a 15-year low. Informed estimates put net income of Class I roads no higher than $350 million—worst showing since 1946. The dip in earnings has had widespread effects. It has drastically slashed capital spending; eaten into maintenance expenditures; further hurt the supply industry; and deepened the gloom of those who see, in the continuing deterioration of the railroads' financial position, a grave threat to the nation. Prospects for 1962 are brighter, but "iffy."**

The financial columns of leading newspapers glowed last week with reports of an upsurge in railroad earnings. October income statements were beginning to pour in, and many of them looked good. But they looked good only in comparison with earlier monthly statements in what has been, on the whole, a disastrous year for railroad treasuries.

New York Central, for example, posted a net of $4,810,574 in October, a considerable improvement over the year-ago net, for the same month, of $215,444. For the first 10 months of this year, however, NYC operated deep in the red, with a deficit of $19,964,072, compared with a loss of $2,301,225 for the corresponding 1960 period.

At the other end of the spectrum, Santa Fe, with an October net of $4,555,449, reported 10-month earnings of $36,915,268. In October 1960, Santa Fe earned $3,900,966; ATSF's 10-months' 1960 net was $36,054,714.

Between these two extremes the news was more bad than good. Most roads, while they experienced a better October this year than last, were still lagging in the 10-month column.

Best-informed estimates now put Class I railroad net income for 1961 at $350 million—"And that's putting it optimistically," as one high industry source told Railway Age. To reach the $350-million mark—which would be the lowest since 1946, when net earnings dropped to $287 million—Class I roads must do better by $27 million in this year's last quarter than in 1960.

Railroad earnings last year amounted to $445 million, and the rate of return on net investment was 2.13%. If earnings drop to $350 million this year, the rate of return will be approximately 1.74%, assuming that the 16-year (1945-1960) average relationship of net income to net railway operating income is preserved.

The continuing slump in railroad earnings has had both immediate and long-range effects.

Capital expenditures have been pared to the bone. Latest estimate is that capital spending in 1961 will total no more than $650 million, down nearly 30% from 1960's $919 million.

Maintenance expenditures have been slashed. In the first nine months of 1961 Class I roads spent $837,392,288 on maintenance of way and structures —a 7.7% drop from 1960. At the same time, maintenance of equipment expenditures dropped by 6.9% to $1,252,325,258.

Freight-car orders have declined. On Nov. 1, only 10,297 undelivered cars were on order—compared with 22,900 a year ago. Deliveries of new cars totaled 27,046 in the first 10 months of this year, compared with 48,351 in 1960. Freight cars continue to be scrapped far faster than they can be replaced. During the 12 months ended Oct. 31, 80,245 cars were retired; only 28,369 were installed.

Over the longer range, students of transportation are increasingly worried over the implications this continuing deterioration of the railroad position holds for the nation as a whole. One railroad, the New Haven, went into bankruptcy this year; others have warned that they may follow if conditions which are hamstringing their efforts to compete for a fair share of the nation's transport package aren't remedied.

What happened to the railroads this year? It isn't enough to say that they are lagging behind the rest of industry in recovering from the recession; the fact is, their basic problems weren't rooted in the recession at all.

This year's 7.58% drop in carloadings (to Nov. 18) was only partly attributable to the lingering effects of the recession.

Of more fundamental importance was the fact that railroads continued to lose traffic to government-subsidized competitors.

What 1962 may hold for railroads presents a guessing game in which few railroad men want to participate at this juncture. But any one of several hoped-for developments could brighten the picture considerably.

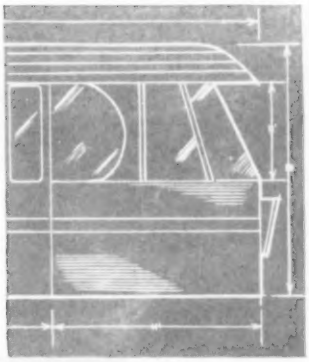
A favorable transport message to Congress by President Kennedy could bring back some semblance of competition to transportation, to the railroads' advantage—if Congress translates any such message into legislation.

A favorable report from the Presi-

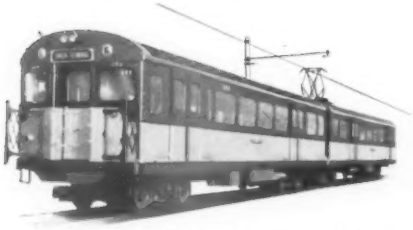
(*Continued on page 124*)

Watching Washington, which usually appears in this space, is on page 122.

New York City Transit Authority

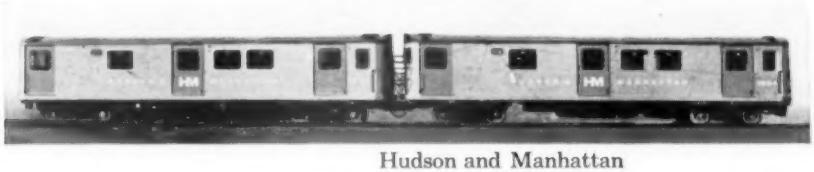


ALL ST. LOUIS-BUILT CARS



Cleveland Transit System

Chicago Transit Authority



Hudson and Manhattan

What this experience means to you

For nearly seventy-five years St. Louis Car has been demonstrating outstanding ability to produce transportation equipment, including rapid transit cars for such cities as New York, Boston, Cleveland, and Chicago.

With this background St. Louis Car has built an organization and facilities which offer you unparalleled experience, expert design assistance, and high efficiency in the production of rapid transit equipment.

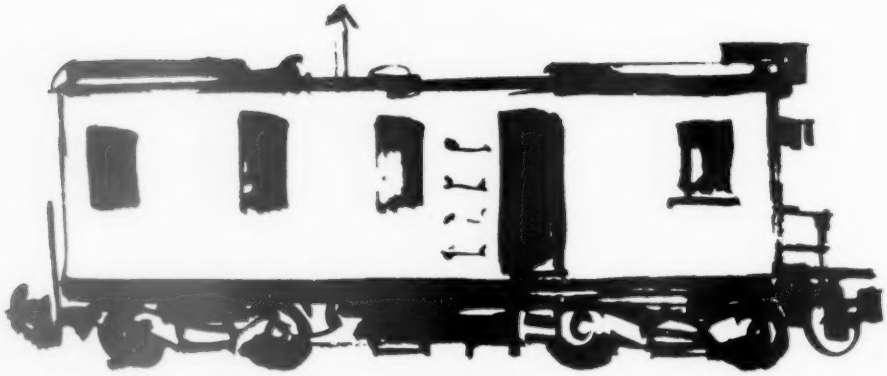
Now, as a working member of the General Steel organization, St. Louis Car furnishes transit and railroad cars designed and manufactured to *your* standards and *ours—from the tracks up.*

ST. LOUIS CAR COMPANY

St. Louis 15, Missouri, A Subsidiary of

GENERAL STEEL INDUSTRIES

Granite City, Ill. • Eddystone, Pa. • Avonmore, Pa.

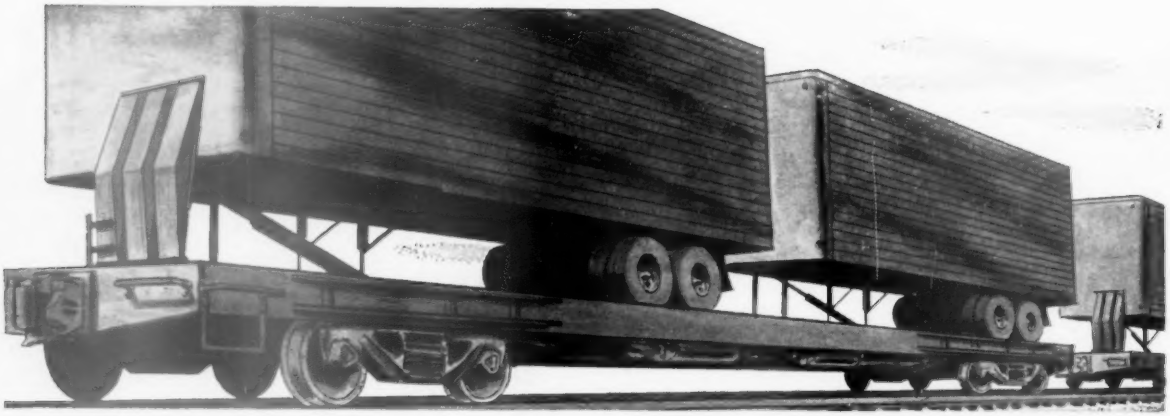


THE COMPANY THAT BROUGHT YOU THE FIRST DIESEL NOW BRINGS YOU THE NEWEST

The newest ALCO locomotive* is the only unit to deliver 2000 hp for traction from a 12-cylinder engine. The engine is the ALCO 251C, latest development in the proven 251 series. Now, for the first time, railroads can realize the ton-mile capacity of 2000-hp units, without added cylinders and increased operating cost.

*Four-motor, DL-721. Six-motor, DL-722. Available either new, or rebuilt through ALCO's Reprofiting program.

ALCO PRODUCT QUALITY COMES FIRST



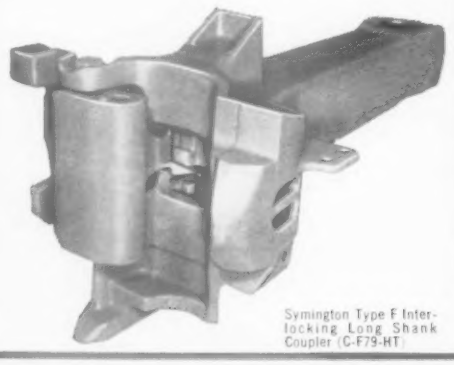
HIGH-SPEED PIGGYBACKS—COUPLED SECURELY BY SYMINGTON

Today's long piggyback cars have special requirements when it comes to couplers and attachments. And Symington meets them with its Type F Interlocking Long Shank Coupler. Measuring 31 in. from horn to pivot pin hole, it is designed for extra-wide swing—13° each side of the centerline—and has brackets on the guard arm for angle cock attachments. Other features include—

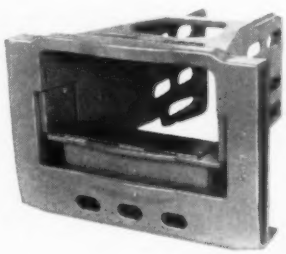
- Coupling contour designed for minimum slack
- Easy, reliable operation
- Improved anti-creep protection
- Increased strength, greater fatigue resistance because of less slack
- Longer service life, less maintenance because interlock design minimizes vertical motion and slack
- Interlock feature prevents slipover, keeps cars in alignment
- Safety shelf designed to support mating coupler in event of pullout

Trailer Train is one of the well-known companies that are profitably operating piggyback cars equipped with Symington railway products. They look to Symington both for quality of product and for service—not only in couplers and attachments, but also in bolsters, truck frames, striking castings and other quality steel castings.

RPI MEMBER

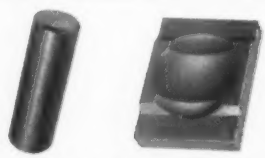


Symington Type F Interlocking Long Shank Coupler (C-F79-HT)



S-93 Striking Casting

Y-45 Yoke Standard Pocket



Y-47 Coupler and Yoke Pin • Y-46 Front Follower

Symington Wayne
CORPORATION
SYMINGTON DIVISION

WORKS:
DEPEW, N.Y.

New York
Chicago
Boston
Philadelphia
San Francisco
St. Louis

In Canada:
Adanac Supplies, Ltd.
Montreal, Quebec

ANOTHER EXTRA FROM YOUR

OXWELD

RAILROAD DEPARTMENT

Maintenance of way

WE'VE BEEN WORKING ON THE RAILROAD, TOO

We mean it. The Oxweld Railroad Department at Linde Company is staffed with railroad men who know your problems and know how to help you solve them, too.

These are the men you'll be working with when you come to us. They are thoroughly trained in the use of OXWELD products and processes . . . cutting and welding apparatus for all phases of car building . . . time-tested RIBBONRAIL welding for continuous welded rail . . . and rods, apparatus, and gases for all maintenance of way activities.

Remember, the services of railroad specialists are yours whenever you buy anything with the OXWELD Brand. To get in touch with these railroad specialists, call your local LINDE representative, or write Oxweld Railroad Department, Linde Company, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, N. Y., or 230 N. Michigan Avenue, Chicago 1, Ill. *In Canada:* Union Carbide Canada Limited, Linde Gases Division, Toronto 12.

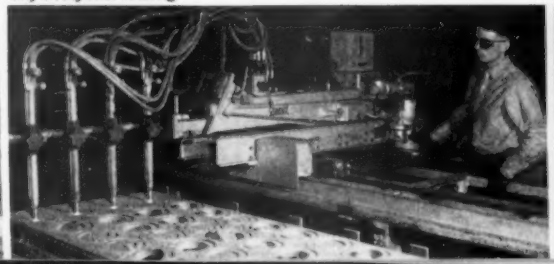
OXWELD RAILROAD DEPARTMENT

LINDE COMPANY **UNION CARBIDE**

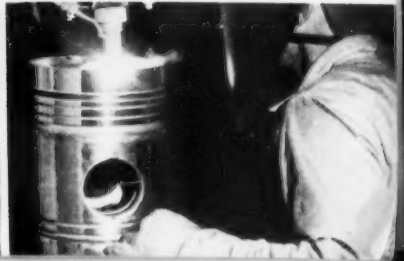
"Linde," "Oxweld," "Ribbonrail" and "Union Carbide" are registered trade marks of Union Carbide Corporation.

"Ribbonrail" service

Oxy-acetylene cutting



Electric welding



NEW!

TANK CAR FOR PNEUMATIC HANDLING OF BULK CEMENT

P-S AIRJET* RAIL CAR

HELPS SAVE CLOSE TO A CENT IN HANDLING COST ON EVERY CUBIC FOOT OF CEMENT YOU MOVE!

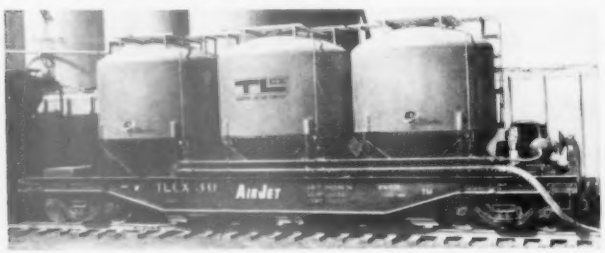
THE NEW P-S AIRJET TANK CAR adds a new dimension to economical, pneumatic handling of bulk cement. The AirJet will accommodate 400 barrels of cement in a 70-ton car and 500 barrels in a 90-ton car. AirJet Cars can be loaded by gravity through tight-sealing circular hatches on the top of each 800 cubic foot tank. You can unload the AirJet directly into trailers, storage bins or silos. All you need is a 4" discharge hose and a supply of compressed air.

NO COSTLY MECHANICAL UNLOADING EQUIPMENT NEEDED. No screw conveyors, bucket elevators or other hard-to-maintain, expensive equipment required. One major cement handler reports savings of nearly one cent per cubic foot in his handling costs.

THE AIRJET UNLOADS CLEAN AND FAST. Its patented aeration system makes it virtually self-cleaning. Waste is reduced substantially and so is the possibility of contamination to following loads. The AirJet Car can be emptied by one man in less than one hour or in about one-third the time required to unload a conventional covered hopper car.

THE AIRJET IS VERSATILE. Products varying in density from 16 pounds to 168 pounds per cubic foot have been handled by the AirJet system. And, though this is not a limit, materials have been moved at a rate of 40 cu. ft. per minute over distances of up to 1400 feet including a 100 foot rise. Nearly any powdered or granular material and most pelletized products can be handled. Stainless steel tanks or special tank linings can be furnished to meet customer specifications.

THE AIRJET TANK CAR IS AVAILABLE FOR SALE OR LEASE. For full information on both methods of acquisition and for greater detail on the car, call or write Pullman-Standard.

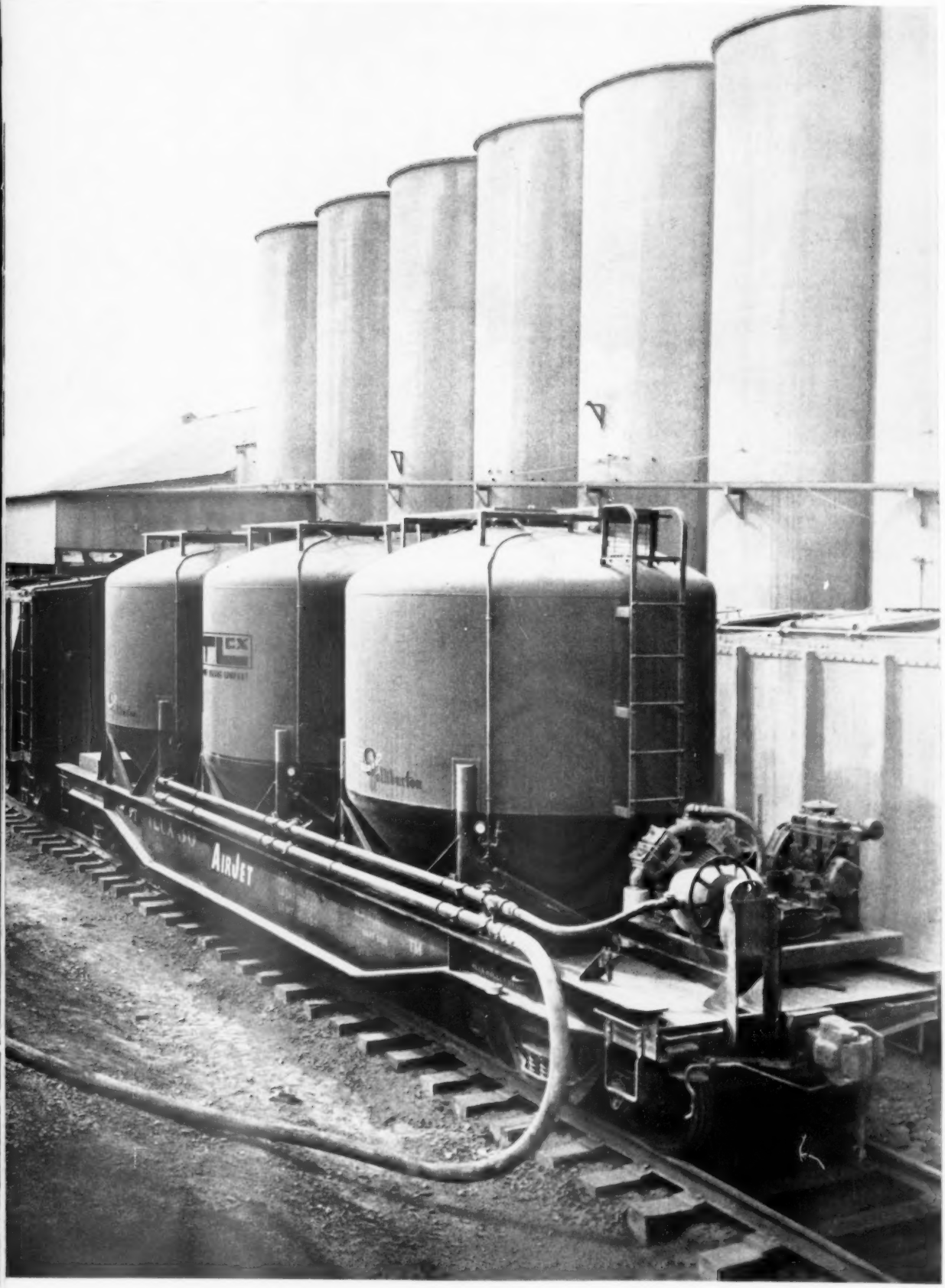


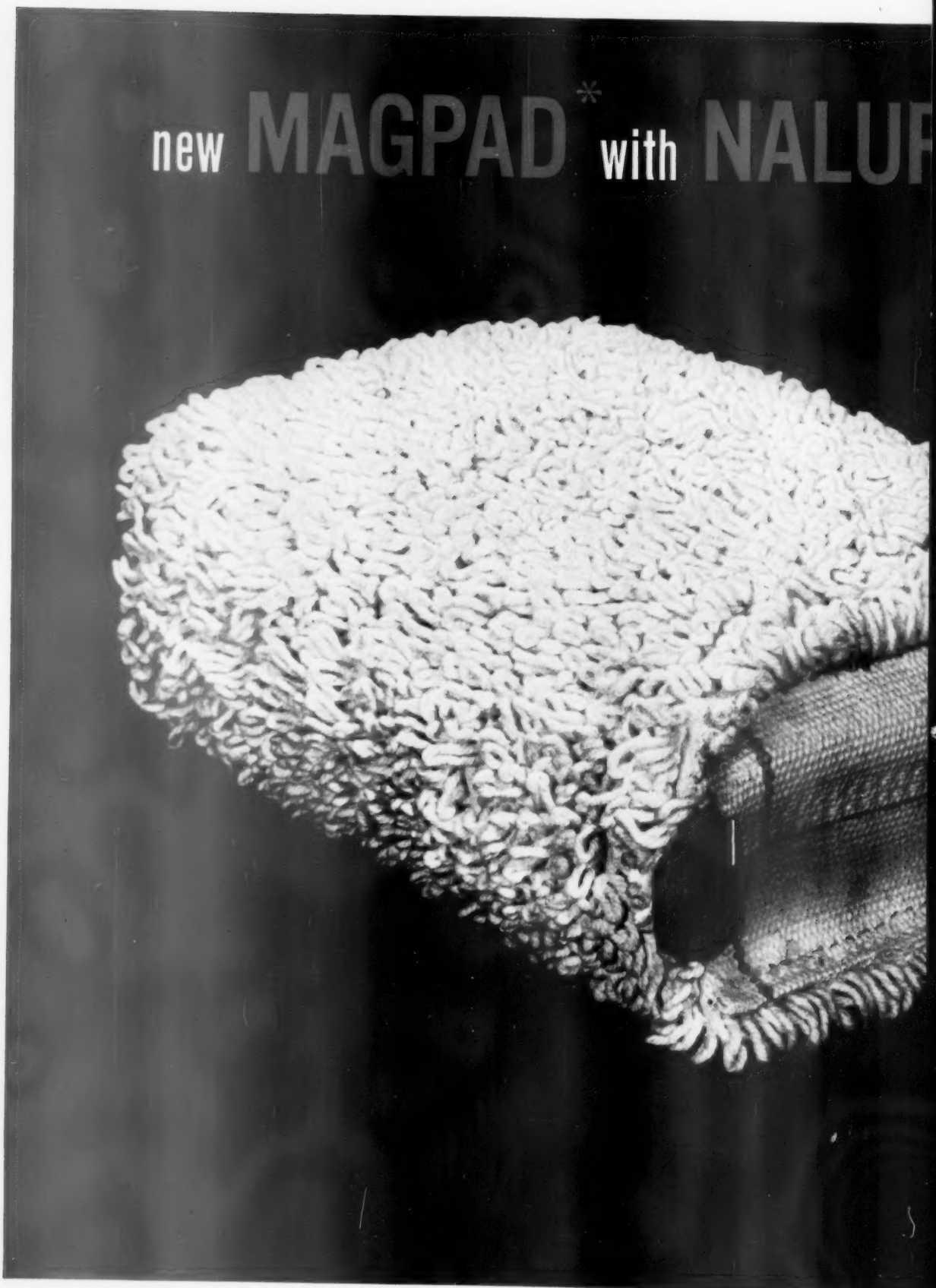
A Trademark of Pullman Incorporated

PULLMAN-STANDARD

A DIVISION OF PULLMAN INCORPORATED
200 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS
BIRMINGHAM • PITTSBURGH • NEW YORK
J. C. FENNELLY CO. • SAN FRANCISCO REPRESENTATIVE

AirJet Pressure Tank Cars can be unloaded directly through a 4" discharge line into trailers, silos or storage bins by utilizing either the rail car compressor, trailer compressor or a stationary unit.


AIRJET


new MAGPAD* with NALUP

a low-cost lubricator that also has internal wicking and lock-stitched tufted cover

The heart of the new MAGPAD is NALUR — a specially formulated acrylonitrile foam rubber developed and produced by National Lead Company. It is highly resilient, has low oil swell characteristics and excellent resistance to compression set at high temperatures.

Outer cover is a heavy high-quality chenille, lock-stitched to withstand a 10-lb. minimum pull on tufts. End closures are tough cotton belting.

Ample internal wicking is provided by 25-ply candle-wick routed through ½" vertical orifices to provide unrestricted flow of oil.

Renovation—The MAGPAD with NALUR is sturdily made—its rugged construction permits renovation by any standard method in railroad use.

Get the full story on the new *low-cost* MAGPAD with NALUR. Ask our representative or write for details. Magnus Metal Corporation, 111 Broadway, New York 6, New York or 80 E. Jackson Blvd., Chicago 4, Illinois.

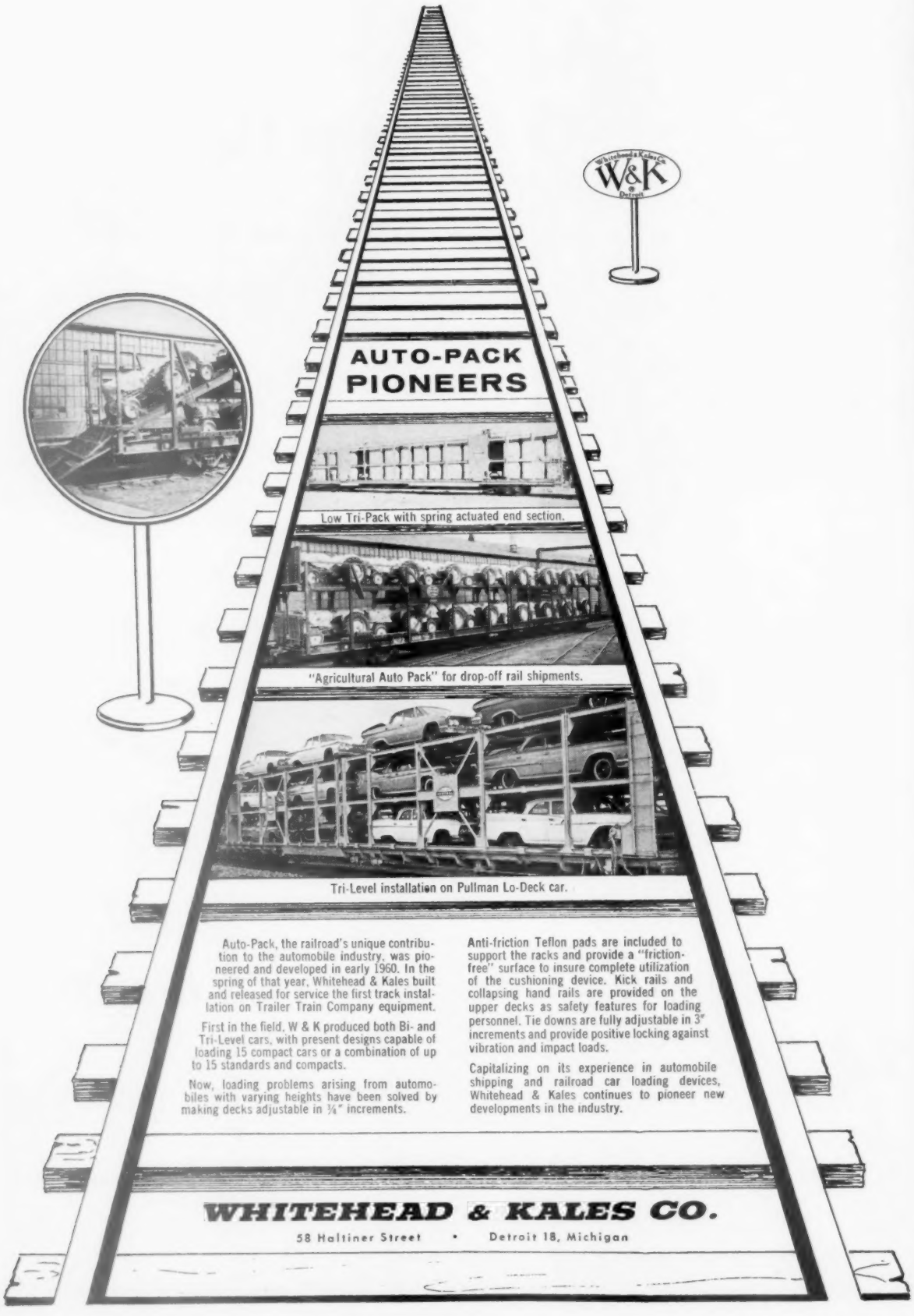
MAGNUS

METAL CORPORATION

Subsidiary of

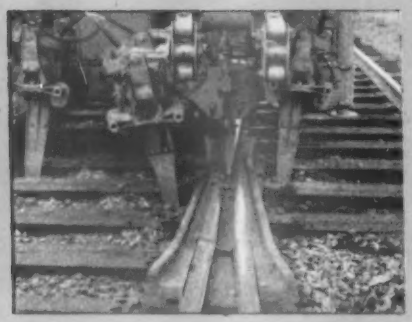
NATIONAL LEAD COMPANY

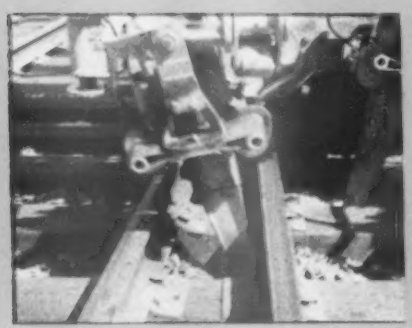
GEARED TO PROGRESS
P R I MEMBER

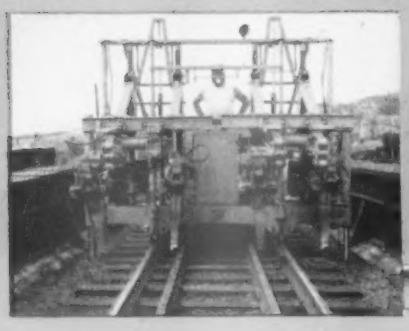

W&K
AUTO-PACK
PIONEERS
Low Tri-Pack with spring actuated end section.
"Agricultural Auto Pack" for drop-off rail shipments.
Tri-Level installation on Pullman Lo-Deck car.
Auto-Pack, the railroad's unique contribution to the automobile industry, was pioneered and developed in early 1960. In the spring of that year, Whitehead & Kales built and released for service the first track installation on Trailer Train Company equipment.
First in the field, W & K produced both Bi- and Tri-Level cars, with present designs capable of loading 15 compact cars or a combination of up to 15 standards and compacts.
Now, loading problems arising from automobiles with varying heights have been solved by making decks adjustable in ¼" increments.
Anti-friction Teflon pads are included to support the racks and provide a "friction-free" surface to insure complete utilization of the cushioning device. Kick rails and collapsing hand rails are provided on the upper decks as safety features for loading personnel. Tie downs are fully adjustable in 3" increments and provide positive locking against vibration and impact loads.
Capitalizing on its experience in automobile shipping and railroad car loading devices, Whitehead & Kales continues to pioneer new developments in the industry.
WHITEHEAD & KALES CO.
58 Haltiner Street • Detroit 18, Michigan

Nothing does it as well as

The JACKSON YARD TAMPER







Note the illustrations at the left and we believe you will agree the new JACKSON YARD TAMPER is about to revolutionize yard tamping. It gets into places that other on-track tampers can not tamp and completely fulfills the major portion of all yard tamping requirements. As one user of this equipment has put it: "This equipment increases our production effort in surfacing leads by at least 100%, with half as many men."

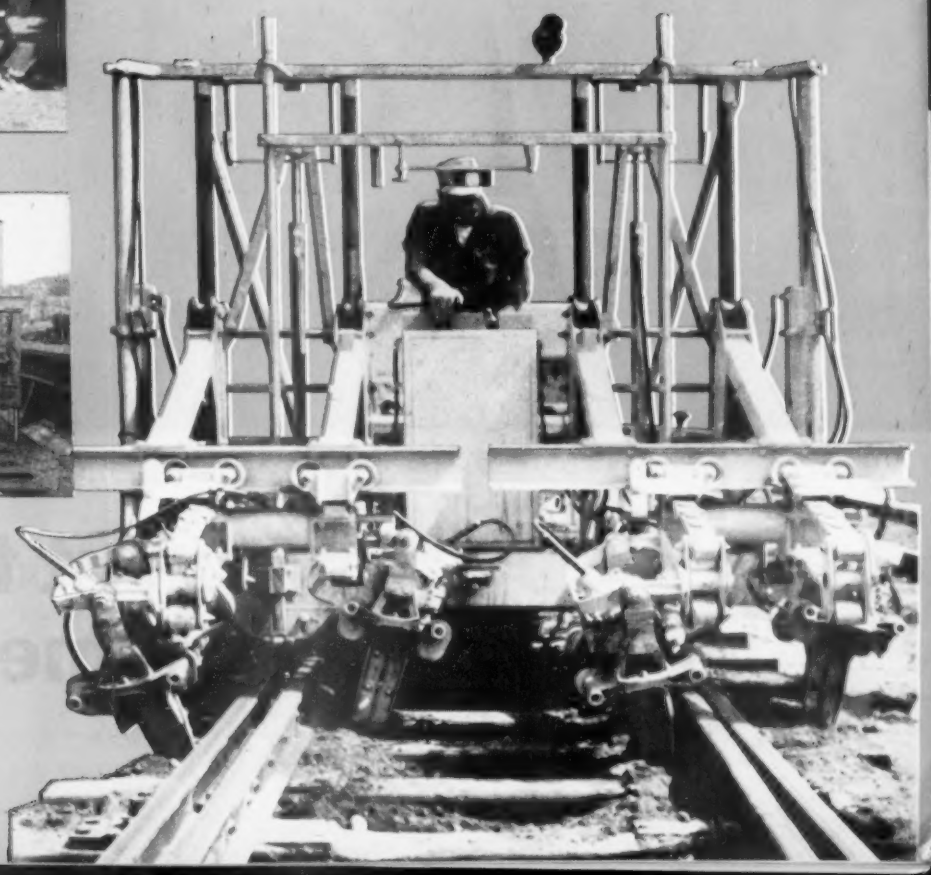
The Jackson Yard Tamper has two independent workheads which may be moved back and forth laterally by means of hydraulic rams. Hence the tamping blades may be positioned for tamping in any desired locations. The single blades are unusually long (26") and so mounted that as penetration into the ballast increases the slant becomes progressively greater. Thus thorough consolidation of the ballast is achieved in a range from 18" inside the rail, directly under the rail and to the end of the tie. And the same blade action makes it possible to do a thorough job of tamping under large frogs and in other tough places. Powerful Jackson vibratory motors insure rapid penetration.

Readily convertible to spot tamping, jack tamping and other normal tamping uses . . . simply by substituting the regular Jackson double blade tamping units for the single blades. It's a tremendously useful machine which is bound to pay big dividends on its investment cost. Let us give you the complete facts.

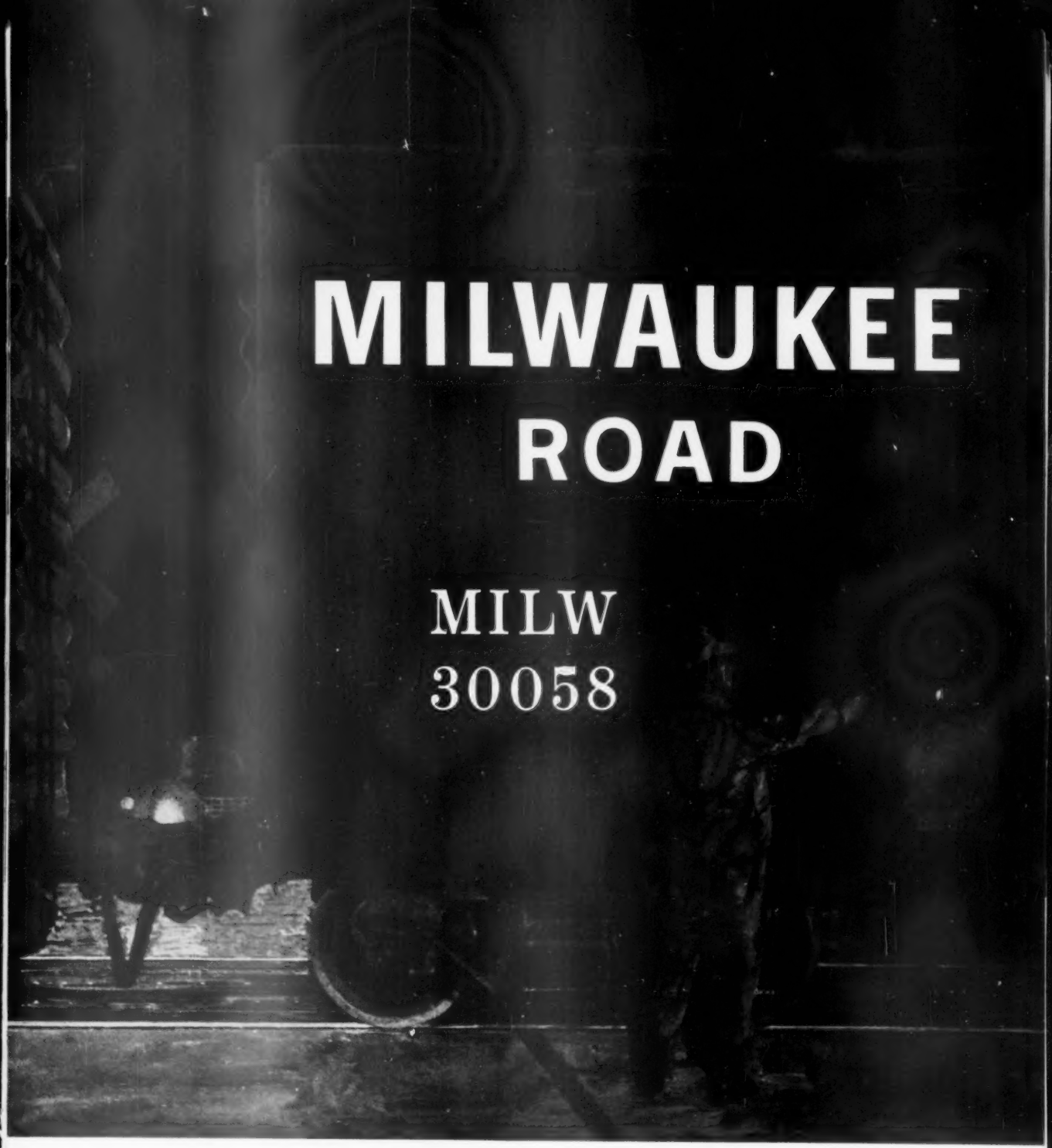
RT-10

As always, direct sales, leases and service to all U.S. railroads

JACKSON VIBRATORS, INC.
LUDINGTON, MICHIGAN



The paint that puts your name in lights



Looks like stencil paint by day. But after dark the difference is dramatic. Because "Codit" Reflective Liquid gives your car markings the power to reflect light over 50 times brighter than paint. It literally puts your road's name in big, bright lights—a most impressive way to advertise at every crossing. Reporting numbers also become boldly visible in any light beam. And "Codit" Liquid makes your markings double as a safety measure, alerting motorists night after night after night.

For a demonstration of "Codit" Reflective Liquid's economical spray-on application, ask your 3M Representative.

CODIT®
BRAND
REFLECTIVE LIQUID

3M COMPANY
ST. PAUL 6, MINN.

There are three big ideas in this picture

THE FRISCO had an idea they could get back the auto-hauling business railroads had been losing. They went to work and came up with another idea —cars specially designed for hauling automobiles. And the third idea was to use Timken® tapered roller bearings for the most reliable service and greatest return on their new-car investment.

Since 1955, the Frisco has ordered the majority of its new freight cars on roller bearings—has over 1000 of these cars of different types on Timken bearings—an investment based on performance like this: 1) Millions of car miles between overheated bearings; 2) Three years without additional lubrication; 3) The ability to roll more miles in a month than most ordinary freight cars roll in a year. The Timken Roller Bearing Co., Canton 6, O.

HEAVY DUTY
TIMKEN®
TAPERED ROLLER BEARINGS

Start with the

50% EXTRA PROTECTION

of THE WAUGH-GOULD TYPE 700

FRICTION-RUBBER DRAFT GEAR

. . . and get increasing protection year after year

Increased protection in service is a matter of official record

WAUGH EQUIPMENT COMPANY

NEW YORK • CHICAGO • ST. LOUIS • Canadian Waugh Equipment Company: Montreal

RAILROADS WAGE WAR
against the hot box scourge

Progressive carriers find infrared cure for 'hardening of the arteries'

"...save just one wreck, and the SERVOSAFE® Hot Box Detective* has paid for itself."

W. D. Murphy, Mgr., Conway Classification Yard, Pennsylvania Railroad, Conway, Pennsylvania.

Main arteries of peace and plenty, strategic lifelines during war and national emergency, the nation's railroads hold an important key to the nation's survival. Strategic network for carrying men and materiel, elusive mobile missile bases for launching a lightning counterstrike at an aggressor, the rails stand firm—one of the country's most dependable "secret" weapons.

Yet today's accent is on speed, as well as dependability, a decisive weapon in itself. Consequently, the railroads are busy taking the kinks out of winding track, scheduling fewer stops, and installing better and better equipment. Object: to give the highball to faster freights and other strategic rail movements.

But trains, like chains, are only as strong as their weakest link. As freights move faster, the railroads' traditional problem, the *hot box,* becomes even more severe. One undiscovered hot box, one journal burn-off—and many cars can end up in a pile of rubble.

In recent years, on the average, hot boxes have cost American railroads over $15 million annually. And this, just in derailments, damage, and delay. Yet consider the total "cost" of only a single derailment—life perhaps, costly litigation, maybe broader consequences.

FOR RAILROAD PROBLEMS: R

On November 16, 1956, the first complete installation of a SERVOSAFE® Hot Box Detective* was made on the lines of the Chesapeake & Ohio Railway Company at Norge, Virginia. Shortly afterward, writing in the C&O's 1958 annual report, M. I. Dunn, Vice President for Operations emphatically stated:

"I consider the hot box detector to be one of the greatest aids to railroading in many, many years. * * * Our tests have proved it 100 per cent effective."

Today, more than *three hundred* SERVOSAFE detective installations later, 28 major Class I railroads across the country (and abroad) are benefiting from the protection, savings, and other operating efficiencies of this amazing infrared safety device. A number of railroads have already begun installing infrared hot box detectors system-wide. New roads are swinging in daily.

Day in, day out, in all kinds of weather, no passing journal box can escape inspection and hot box detection by the super-sensitive, ever watchful infrared trackside scanners —the eyes that "see" heat. The Detective will give positive evidence of abnormalities on tape from spotting points 100 miles or more away. It will automatically sound alarms, set trackside signals to "stop."

The latest breakthrough, the "talking" Hot Box Detective, *radios* a passing train crew the exact location of a dangerously overheated journal anywhere from engine to caboose—all automatically. Before serious trouble begins, the engineer can stop the train or slow it down to avoid a fire, broken axle, or disaster.

WHAT COST HOT BOX... WHAT PRICE WRECK

Let's face the cold, hard facts. Survival may be at stake. *More wrecks result from hot boxes, than from any other single cause!* Figure that the average train wreck may cost a railroad anywhere between $40,000 and $500,000.

In the words of one railroad official, "... save just one wreck, and the SERVOSAFE Hot Box Detective system has paid for itself."—(Add the words, "many, many times over!")

REDS 'DISCOVER' INFRARED

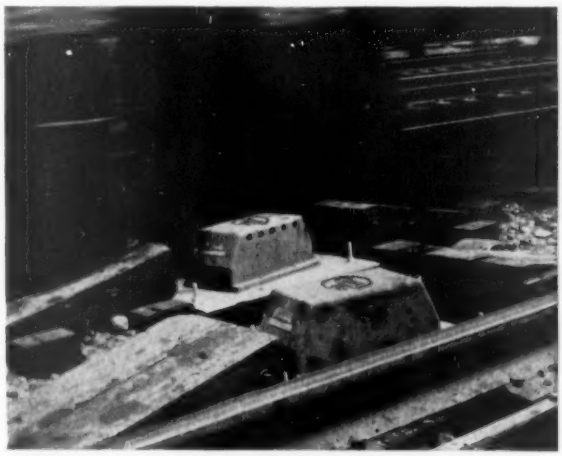
Throughout the rest of the world foreign railroads are modernizing and expanding at feverish pace.

A sobering report was issued from Moscow last year that Russian scientists had "discovered" an infrared hot box detector amazingly like our own—and that the Reds were busy installing the device at strategic locations throughout the Soviet and satellite rail networks.

'Way before Russia, from the same house that pioneered the major breakthroughs in infrared aerial reconnaissance and in heat-seeking infrared missile guidance systems—came the solution to control of the railroads' greatest problem: the hot box.

Here is the proved method for protecting strategic bridges, tunnels, yards, and structures... for safeguarding major rail arteries and rights of way.

Here is the patented SERVOSAFE Hot Box Detective system, the amazing "eye that sees heat."



Wheels whirl by infrared sentinels of SERVOSAFE Hot Box Detective system, the "eyes that see heat." No passing journal box can escape inspection and hot box detection. The Detective charts heat of *all* journals... instantly nabs dangerously overheated journal bearings, or "hot boxes."

Railroad Products Division

SERVO CORPORATION OF AMERICA

111 New South Road • Hicksville, L. I., N. Y. • WEIls 8-9700

SERVOSAFE® HOT BOX DETECTIVE SYSTEMS • RAILROAD RADIO COMMUNICATION SYSTEMS • 'WHEEL CHECKER' BROKEN FLANGE DETECTOR

**Protected under one or more of the following U.S. Patent Nos.: 2,880,309, 2,947,857 and 2,963,575. Other U.S. and foreign patents pending.*

Ideas Unlimited

how to serve you

Discussing Better Service. Standing, left, delegates J. M. Godfrey, traveling freight agent, Chattanooga, Tenn. (nearest camera) and J. D. Huddle, crew clerk at Norfolk, Va. Seated (left to right), N&W executives: Vice President-Finance H.M. Redman, Vice President and General Manager H. C. Wyatt, and Vice President-Traffic R. N. Woodall.

Committee Meetings dealt with safety, careful car handling, government regulations, citizenship, sales and service, and many other subjects — all with the goal of providing Better Service.

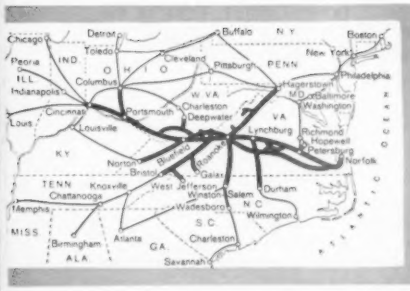
NATION'S
GOING-EST
RAILROAD

. . . on better

N&W President Stuart T. Saunders tells how the N&W-Virginian merger has improved service to shippers . . . and outlines plans for further expansion and improvements.

Recently, some 500 N&W men, from every section of the system, representing every phase of railroading, met at the Road's headquarters in Roanoke, Va., for a 2-day seminar on how to provide better rail service for our customers. Ideas flew thick and fast during this 35th Annual N&W Better Service Conference. At committee meetings, *every* individual delegate had an opportunity to ask questions, express opinions, and suggest methods of improving service for shippers of the nation. This annual conference is the climax to 60 meetings of 20 local Better Service Clubs and 16 meetings of Regional groups — all part of a continuing program designed to produce Better Service.

Many positive results were achieved. Fresh approaches to old problems were presented. New and practical suggestions were made. Individual responsibilities were redefined. Delegates returned home with high enthusiasm . . . carried new knowledge, renewed vigor back to fellow employees. This is dynamic action that means a better railroad and increasingly Better Service for N&W customers during the months and years ahead.



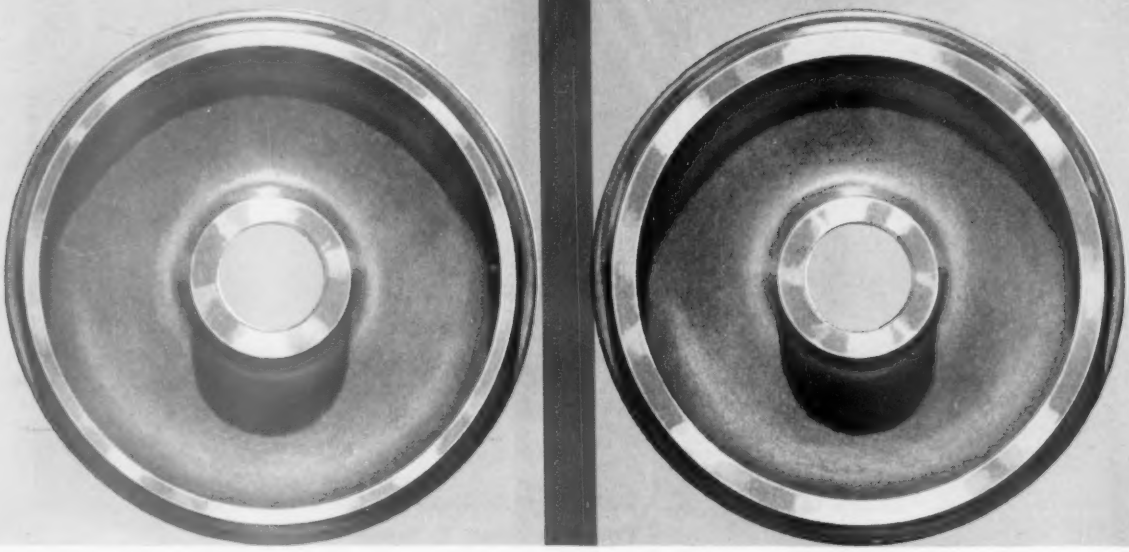
N&W

NORFOLK and WESTERN RAILWAY

GENERAL OFFICES · ROANOKE, VIRGINIA

one of these is a ONE-WEAR WHEEL
the other is a TWO-WEAR WHEEL

THEY'RE BOTH CAST BY GRIFFIN



HERE'S WHAT THEY HAVE IN COMMON...

- Developed to meet the grueling demands of high mileage freight cars
- Special-design parabolic plate distributes stress evenly
- Cast within 20-thousands of an inch tolerances
- Perfectly round as cast . . . no machining required
- Only two tape sizes. (Actually, most Griffin® Wheels are within two half-tape sizes!)
- All present AAR gauges can be used
- Pressure pouring in graphite molds results in superior flange and tread
- Long sweeping fillets under flange and rim give greater strength

HERE'S HOW THEY DIFFER...

GRIFFIN EQS® ONE-WEAR WHEEL

- Minimum 1¼-inch back rim. Can be turned on both flange and tread to restore full contour.

GRIFFIN EQS® TWO-WEAR WHEEL

- Minimum two-inch back rim, with one-wear tread and flange design.
- A *multiple-wear* wheel that can be "turned" several times. (You're assured of *at least* two full turns, regardless of flange wear.)

GRIFFIN EQS
ELECTRIC QUALITY STEEL

GRIFFIN WHEEL COMPANY 445 North Sacramento Boulevard, Chicago 12, Illinois
GRIFFIN STEEL FOUNDRIES Ltd. St. Hyacinthe, Quebec; Transcona, Manitoba, Canada

For The Railroad Industry...For America!

Cities Service scientists work tirelessly to perfect quality petroleum products—for the railroad industry...for America!

Out front in Quality...
Out front in Service, too!

CITIES SERVICE

毛泽东思想

U. S. SURVIVAL AND THE RAILROADS

How to go under in 3 easy lessons

1 Take a modern industrial society built and based on railroads (as in America, Russia, England, France, Germany . . . and, increasingly, Red China, see left)

2 Knock out the railroads (in the U.S., say)

3 Then what have you got? (Unless we do something almost immediately, we'll soon find out)

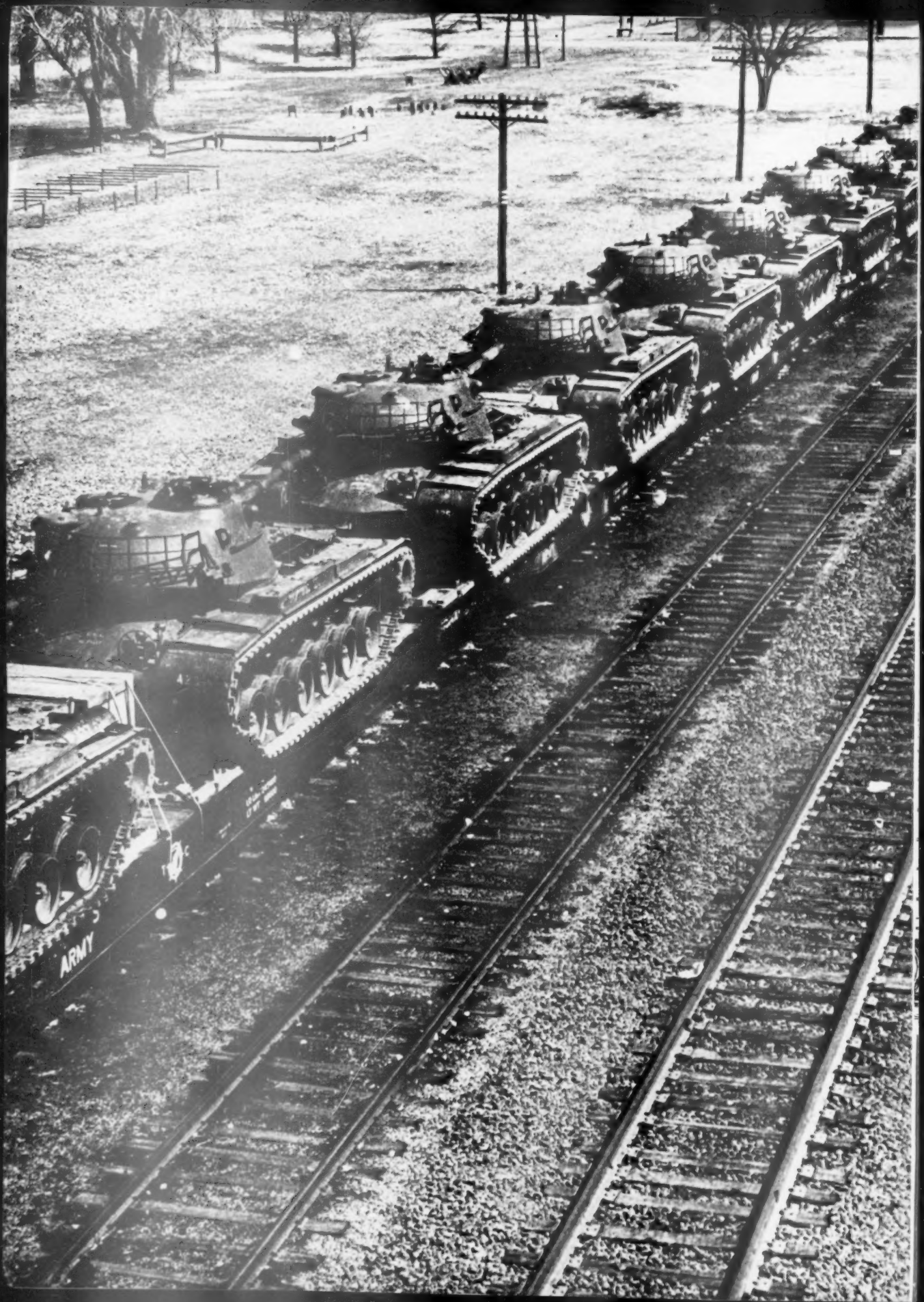
No one will forget the day the trains quit running. Absenteeism will run high but it won't matter much. The plant won't be open anyway. There will be a run on the stores, since many of the goods won't be replaced when they're gone. Harvests will pile up in the fields, coal mines will close. Detroit will announce within the week that it can't lessen the crisis with new trucks because, suddenly, it has no materials to make them with.

The prospect is not a happy one. It need not happen. Yet all that America has to do to bring it to reality—and lose the survival race by years—is nothing. Change no policies, alter no programs, just nothing. Railroads are the bedrock of America's industrial strength. This bedrock is being eroded away by the backwash of foolishness.

Without efficient, long-haul mass transportation—the kind *only* railroads can provide—a modern industrialized society cannot exist. Such a society is too complex, too interdependent to survive as scattered islands.

America differs from most other industrialized nations in one significant way: its size. Raw materials, production centers and markets are often thousands of miles apart. In the race of East vs. West, only Russia and China share that problem. There is hardly a question as to what they are doing about it. They are building railroads, and improving those they have now.

Greybeard transport policies threaten to deprive America of this great economic asset just when it is needed most. The day U.S. trains stop, Khrushchev will win without firing a shot.


ARMY

U. S. SURVIVAL AND THE RAILROADS

In World War II

— with cars rationed
— with tires rationed
— with gasoline rationed
— with virtually no production of non-military vehicles

where would we have been without railroads?

Between 1941 and 1945, America's railroads performed what probably is the longest continuous miracle in transportation history. Many doubted it could be done. A decade of depression had weakened the railroads, forced one-third of them into bankruptcy. But they hung on, their plant was preserved. As the world soon learned, capacity of that plant surpassed belief.

Hurriedly, the trains rolled again. By 1943 the whole burden of national war effort sat squarely on ribbons of steel. New cars and trucks were a thing of the past; tires and gasoline had disappeared.

The job the railroads did is simply in two figures: 97% of the troops, and 90% of all military materials and supplies, moved by rail. This, while the civilian economy was served, too. It was a performance that had to be; fortunately, the railroads were there to do it.

Yet with war in the air as it has rarely been in history, it seems to be U.S. policy to drive our railroads out of existence

U. S. SURVIVAL AND THE RAILROADS

Trains are most efficient carriers ever developed

STEEL WHEEL

To move 100,000 tons of freight, coast to coast, 917,200 gallons of fuel are needed to move trains.

RUBBER TIRE

Same load, same distance, and fuel requirements triple—2.9 million gallons when trucks are used.

BARGE OR SHIP

Still more fuel (4.4 million gallons) if the same tonnage is handled coast to coast by water.

yet we've been stripping U.S. of its railroad plant at a terrifying rate . . . GOING,

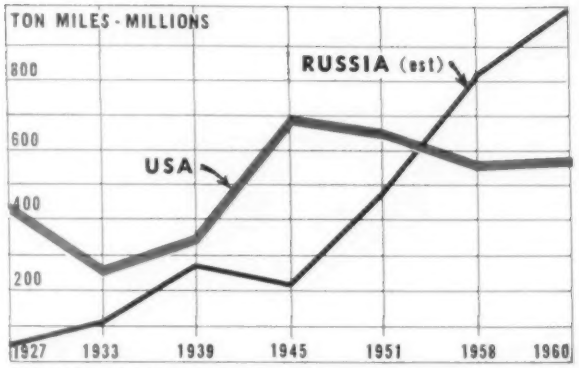
This is how America stands to railroad strength in

Russia promotes its railroads, using them as the basic low-cost transport system. America restricts and regulates its railroads, depresses them into a stand-by role. The chart at right shows the result.

The Russian approach is smarter. In terms of inherent efficiency—how to get the most out of fuel and manpower, for example—railroads are unsurpassed.

Trucks need three times the fuel, 14 times the man-days, to handle equivalent loads. Jet aircraft, with swift equipment turnaround, need 13,000 man-hours to do what 3,200 railroad man-hours will do.

If railroad cars are loaded to capacity, the cost of moving the extra tonnage is slight. More cars per train can be added at modest expense. Railroads by nature are highly elastic, capable of quick expansion.



GAIN AND LOSS IN RAIL TRAFFIC

GOING . . . AT AN AVERAGE RATE OF 1,000 MILES OF TRACK A YEAR

suffer from its fast-ebbing
the three kinds of war that are threatening us . . .

THREE KINDS OF WAR

1 Economic War—the kind

And who's to say we're winning it?

America's position in world trade is delicate at best. At home, imports of foreign-made products are climbing; exports are at a high level but show few gains.

In recent months, for example, U.S. producers have lost sales in Argentina, Egypt, India, the Philippines, even nearby Mexico. The list keeps rising.

The European Common Market countries, growing stronger internally, already push for a larger stake in world trade. Japan makes new inroads in Latin America. Russia dumps oil to unsettle world markets. China exports grain while its own people go hungry.

The U.S. balance-of-payments deficit runs now at a $3 billion annual rate. Gold reserves, already hard hit, remain in danger. The ingredients of victory? Hardly.

Transport is a basic part of every cost

As much as 50%, sometimes more, of what buyers pay for delivered raw materials (coal, for example) represents the cost of transportation.

A new automobile delivered from Detroit to the East Coast carries a freight-bill tag of nearly $100.

Virtually everything purchased has a built-in cost for transport—sometimes two or three layers, if costs of moving raw materials and components are considered.

America's annual freight bill alone exceeds $32 billion annually. And it is higher than it should be, much higher. There are ways it can be cut sharply.

According to one economist, the U.S. could easily trim its transport bill by several billion dollars. The need, he says, is to adopt policies that will allocate traffic among all forms of transport, utilizing each form where it is best fitted.

Are we pricing ourselves out of world markets?

Price sells. Japan recently won a large railway equipment order in Central America by underbidding U.S. competitors almost 50%.

American prices are high for many reasons, and luxury transportation at home is one of them. Yet every added nickel hurts. In today's no-holds-barred scramble for trade, U.S. producers can't long survive if all they have to rely on is product quality and quick delivery.

In the newer nations particularly, where hand-to-mouth economy is the rule and money reserves do not exist, the low bid gets the order. Transportation waste at home could be just enough to make the difference.

Champagne tastes on a beer budget

There was a World War II saying to the effect that all the transportation the military wanted was all of everything.

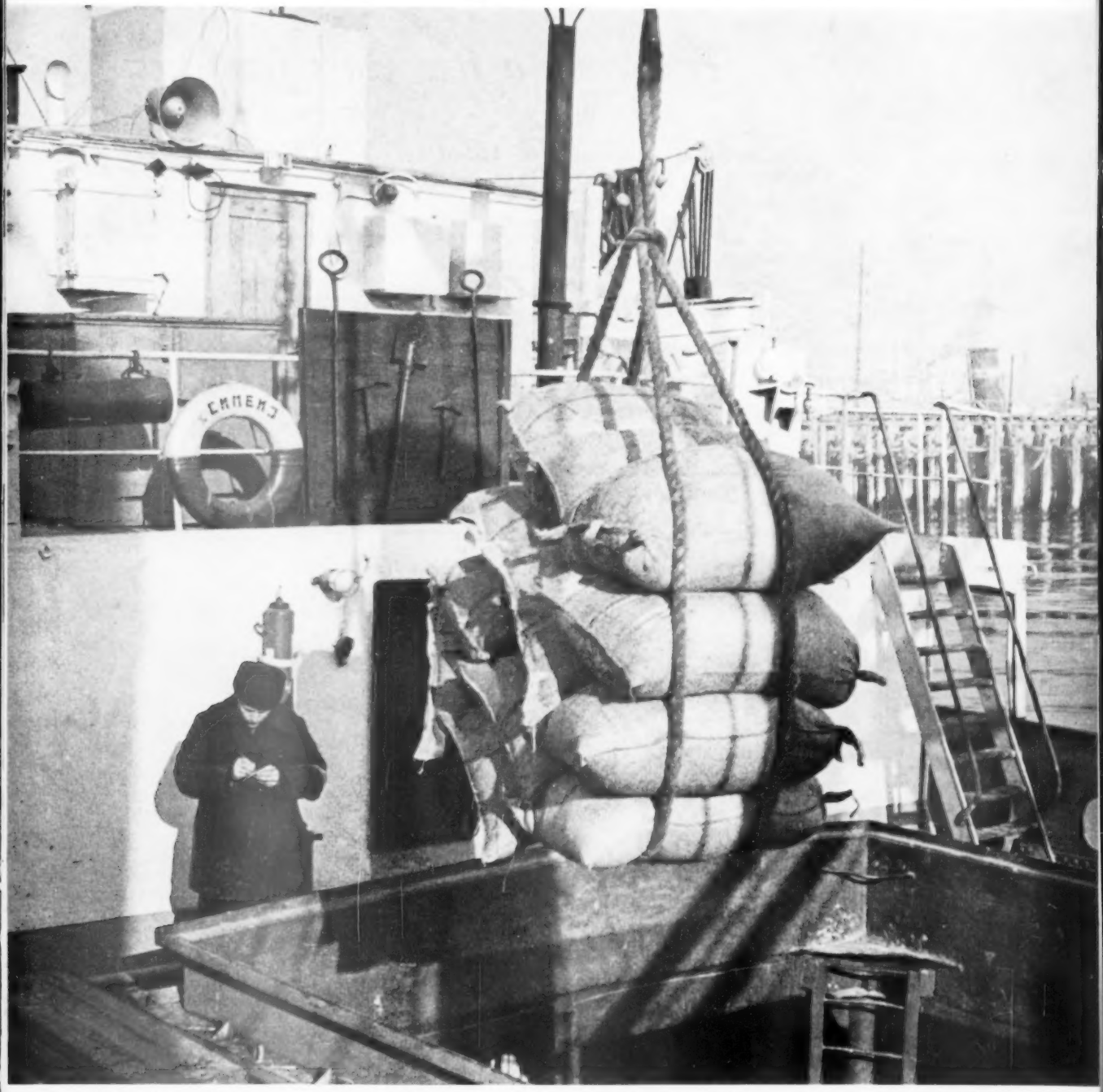
Federal, state and city governments apparently liked the concept. They have since made it the national transport gospel. All the highways space will afford, all the airport capacity possible, endless waterway improvements. Since 1946, these have cost $162 billion.

Today, America is wasting more transport plant than most countries own. The all-of-everything idea is progressing toward its logical and expensive end. Transport facilities are often four deep—rail, highway, air and water.

The arrangement may be nice but it isn't cheap. Expansion of the transportation hodgepodge will cost the country an estimated $12.5 billion in public funds in 1961 alone.

No wonder people are beginning to wonder whether the U.S., rich as it is, can afford guns, butter and coddling all at the same time. Putting essentials ahead of luxury is the way to meet the growing challenge from the East. Transportation suggests itself as a good place to start.

we're already in



RUSSIAN BARTER WITH INDIA Grain (and oil) are pushed into world markets as the USSR steps up its economic offensive against the West.

THREE KINDS OF WAR

2 Limited War—the kind

If it came a few years from now—and we had let our railroads continue to run down at the present rate, we would soon find ourselves a nation on bicycles (if we had bicycles)

WHO WOULD SUPPLY ALLTON?

Rolling adversity has not stopped the railroads—yet. They handle 45% of intercity freight. What other form of transport, in a national emergency, could absorb this load and handle military needs, too? It can't be done.

U. S. SURVIVAL AND THE RAILROADS

we're now arming for

No one in America wants war or seeks it. Yet the country today is forced to accept the prospect of another Korea—in Berlin, Viet Nam, Congo, who knows where? Defenses are being expanded, troops called up.

There can be no argument with these steps. National survival demands them. Still, one nagging worry persists: Are the military planners placing U.S. defenses on a potentially weak underpinning?

The frank truth is that America's great resources, productive capacity, even its will to fight if need be, could be sabotaged by transportation failure. And such a failure is not beyond possibility, should war come.

U.S. transport capacity is at once abundant and scarce. In normal times, plentiful to a fault. During a war, even a limited one, perhaps dangerously scarce.

Invariably, in past emergencies, railroads have stepped in and absorbed wartime loads. They handled 72% of the freight, 64% of the troop moves, during Korea, for example. Could they do this kind of job again?

Railroads, themselves, are worried. They have bluntly said: "Failure to correct the incredible public policy inequities which are weakening our railroads is a threat to national security."

The effect such policies have had on railroads in recent years is certainly no secret. The passenger car fleet, for example, has 10,000 fewer cars than 10 years ago. The freight-car fleet has shrunk less, but nearly 40% of the cars are more than 20 years old.

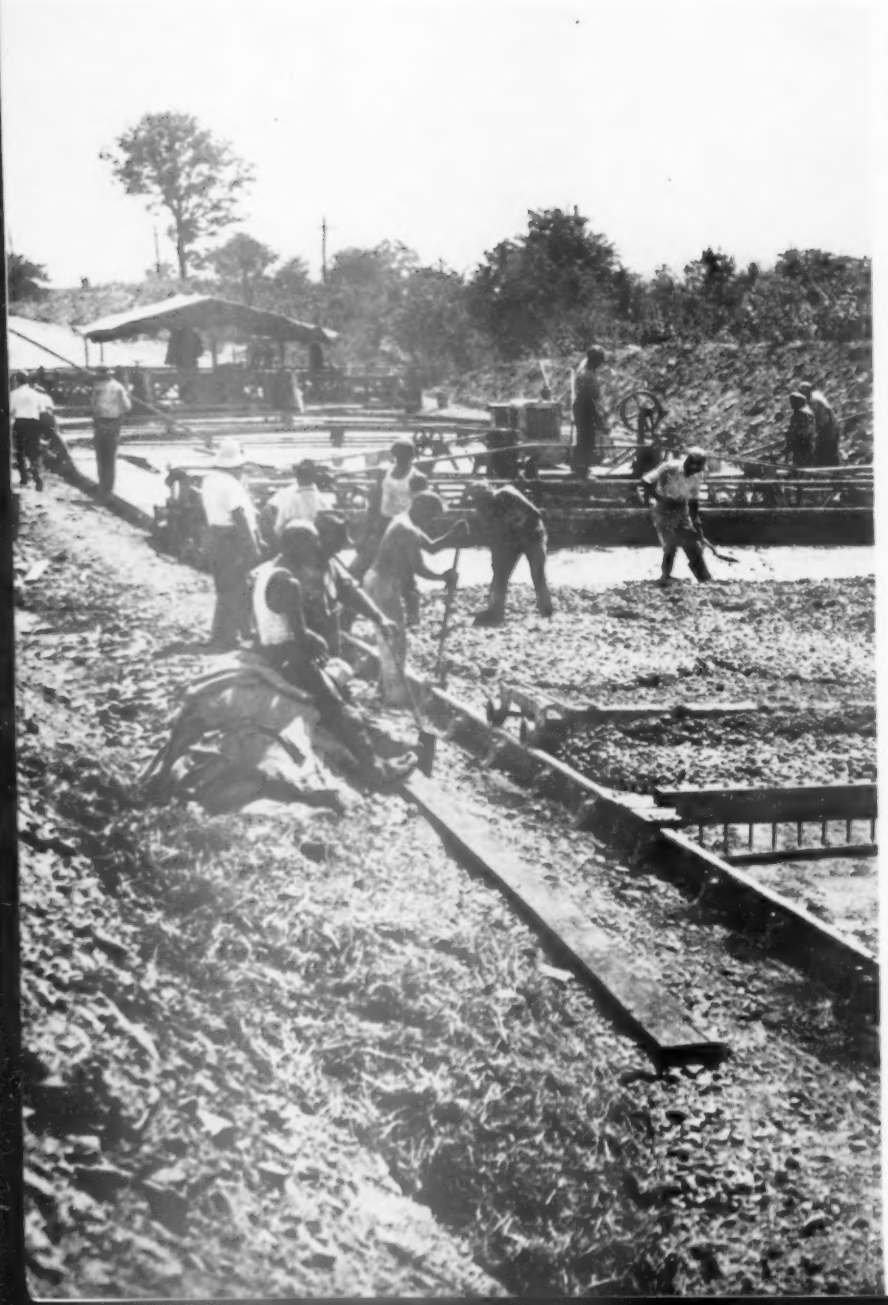
By simultaneously reining in railroads while promoting the development of other forms of transport, America may be building its house on sand. A sudden surge of wartime traffic could completely wreck it.

HOW WOULD PEOPLE GET TO AND FROM AVERY?

Continue to knock out the railroads, put the whole passenger load on highways and airlines. Stop auto production, ration fuel, use the air for urgent military needs. That will take care of American mobility in a hurry.

THREE KINDS OF WAR

3 Nuclear War—the kind a nation into a group of



It would be an eternity before a wounded America could repair and replace its road, motor vehicle and fuel supply system

The picture at the left shows a modern highway inching across Pennsylvania. It has taken weeks to reach this state of construction—the surveying, grading, filling, bridging, all these have come before. Road-building is a slow job, even with modern machines and skilled manpower.

If this road, or any like it, should one day be wrecked by a nuclear attack it would take almost as long to restore it as it took to build it the first time. Another highway elsewhere can't be robbed of parts to repair this one. You can't pick up and move a piece of road.

Imagine having to wait for roads to be built again while a war waits.

Imagine not beginning the urgent restoration job after nuclear attack—of not being able to begin until the country can be laced together again with usable highways.

And if, by a miracle, the job could be done, where would enough vehicles be found to meet even emergency needs? What genie would provide the fuel?

Such questions have obvious answers. America is creating this added risk for herself by a lack of foresight in transportation.

that could turn us from scattered communities

A railroad is as flexible —as capable of re-assembly —as an erector set. Recovery would be painful... but relatively swift

French railroads in Normandy were chewed to bits during the fighting in 1944. Nuclear bombs could not have done a better job. Yet in a matter of days the lines were cleared, repaired and trains were running again.

In Germany it was the same story. Allied bombers found it impossible to knock out railroads—and keep them out.

America should take a lesson from this recent history. It is virtually impossible to destroy a railroad network.

Indeed, a railroad system is remarkable. If need be, whole segments can be picked up and moved. A railroad can, in fact, move itself—pick up entire panels of track, load them, haul them cross country to where needed most. A few men with simple tools can put them in place.

This facility for quick movement, for quick reassembly at any point, is something no other form of transport has.

The U.S. has almost 400,000 miles of rail trackage now. Shrinking this mileage in the face of possible nuclear war will deprive America of what could be its greatest nation-saving asset.

Toward a National Survival

If we don't have a strong railway system in it, we can throw the rest of the kit away.

Communities will survive. That's no problem. But will the nation survive? Will our communities remain effectively connected?

America today faces threats from at least three directions. Each is seeded with grave danger. The nation needs every source of strength it can muster because nothing less than survival is at issue.

What a nuclear attack would do to the United States is, at best, a guess. Even experts disagree on the likely extent of damage, on fallout danger, on our capacity to repel an attack and retaliate.

One thing is certain, however: If a nuclear attack should occur, there will be survivors. And national hand-wringing is not the way to prepare those survivors for the vast job that would lie ahead of them.

Meanwhile, Communist leaders seem content to busy themselves with threats of brush wars and with trying to make good the boast to "bury America" economically.

The American people recognize these challenges and are in a mood to support whatever steps are necessary to meet them. These steps have to include changes in transportation—some establishment of order in place of disorder—or almost all else will be meaningless.

Railroads, because they are inherently economic, flexible and capable of performing any transport task, are fitted to be the basic carrier in transportation, peace or war. They are not that now, because artificial reasons prevent it.

Nothing federal and state governments can do in 1962 is more urgent than correction of these flaws. Unless action is taken, and taken soon, portions of the present railroad system will very likely collapse. America can ill afford such a thing. If there are only fragments of railroads or, worse, no railroads at all, this country is in for trouble.

A good many steps are needed *now*. If these are provided, they will go far toward shoring up railroad weaknesses and, with that, will remove a potential danger point in the national armor.

ITEM: America should recognize the availability of a strong railroad system for war or defense can only be assured by intensive development and use of that system in peacetime, which has not been done for years.

From 1946 to 1960 railroad freight traffic declined 4%, while truck traffic rose 3.5 times and waterway traffic increased to more than four times 1946 levels. Rail passenger traffic fell 33% during these years. Air travel increased six-fold, and automobile travel rose to 2.5 times the 1946 level.

ITEM: Non-utilization of railroads—carriers that thrive on volume—has reduced railroad earnings almost without interruption. Since these are private companies, their desire to expand and modernize has been frustrated. Credit has become almost a forgotten word, as well it might when the return on net investment—2.1% in 1960—is lowest among all major industries.

In contrast to this lean financial diet of the railroads, government spending for other forms of transport has gone higher and higher. In 1947, these government outlays were at a $3.5 billion annual rate; the 1961 totals will be 360% higher than that.

Capital expenditures by railroads are lower this year than they were in 1947. These carriers will spend around $650 million for additions and betterments. This is 5% of what governments will spend on behalf of other forms of transportation.

Railroad financial starvation is directly related to government-sponsored highway, waterway and air programs. It is the latter which have given this country at once an abundance and a scarcity of transportation.

Kit

ITEM: One way to restore railroad vitality, to obtain the economic benefits of efficient, low-cost transport, is for Congress to undertake an immediate overhaul and modernization of the regulatory laws which impede railroad progress. Give rail carriers freedom to compete. Let them price service on the basis of cost, not on what other transport can afford.

As things stand now, the federal and state commissions regulate virtually every movement a railroad makes. By a remarkable double standard, 90% of waterway traffic, and as much as two-thirds of the freight moved by highway, is untouched by regulatory control.

Regulate all transportation alike or free all equally. This simple change in policy would put railroads back in position to perform the service this nation now needs more than ever.

ITEM: If this country is to have plentiful railroad service in these critical times, efforts must be made to bring it about. It won't just happen. Regulatory equality must be accompanied with equality in other areas, too.

For example, users of the transport plant built and maintained by government funds pay only token amounts for using that plant.

Railroads, meanwhile, pay all the costs of building and maintaining their facilities—plus a heavy tax load in addition.

A new rule, under which compensatory user charges can be collected on government-provided facilities, would establish a new yardstick for measuring the economic performance of all carriers.

ITEM: Providing railroads with the tools they need—that, too, is part of the job. Accelerated depreciation rates are badly needed to bolster railroad strength.

Locomotives are assumed to have a useful life of 25 years, but many wear out in 15. Freight cars have an allotted lifetime of 28 years for tax purposes; passenger cars, 35 years.

Such equipment can totter along that far if it must. But the arrangement has two flaws: (1) it does not recognize obsolescence and thus freezes progress; and (2) it fails to generate sufficient cash for replacement as costs rise.

Railroad structures are woefully worse off. They are supposed to last a century.

ITEM: Reshaping this nation's transportation resources to fit today's urgent needs is a complex job. Erratic policies have generated almost total disorder. Common carriers have been treated differently, one from the other; all have lost ground to the private carrier.

An estimated 66% of all highway freight is moving in exempt and private vehicles. These carriers, including the elusive gypsy who operates at law's edge, have helped sap America's transport strength. Yet these carriers are unreliable beyond today. They thrive unnoticed—even unknown.

This is another example of waste in transportation; another reason why U.S. goods are priced higher than need be in world markets. When common carriers must spread fixed costs over shrinking volume, everybody pays.

If this added load were thrust upon common carriers in an emergency who would handle it? Only railroads could absorb such a burden without chaotic result.

ITEM: America's railroad strength has not been eroded away entirely by action, and inaction, in Washington. State and local governments can take some credit, if only from the uncommon property tax load they impose. Inequality between railroads and other carriers —indeed, between railroads and almost all other property—is common practice.

Two years ago railroads collected the figures. The $422 million these carriers paid in property and miscellaneous taxes was hardly comparable to the $22 million paid by common carrier truck lines. Air carriers and bus lines paid less than the trucks.

This tax situation is worse in some states than others. The total load and inequality are what count, however. The greater the tax burden, the less chance rail carriers have to compete, the less they can do toward improving the economy of rail service.

Railroads have trouble making these points. They seek freedom to provide lower unit costs in transportation. By so doing they will help America compete more effectively in world markets; enlarged traffic volume, in turn, will provide them with resources for growth.

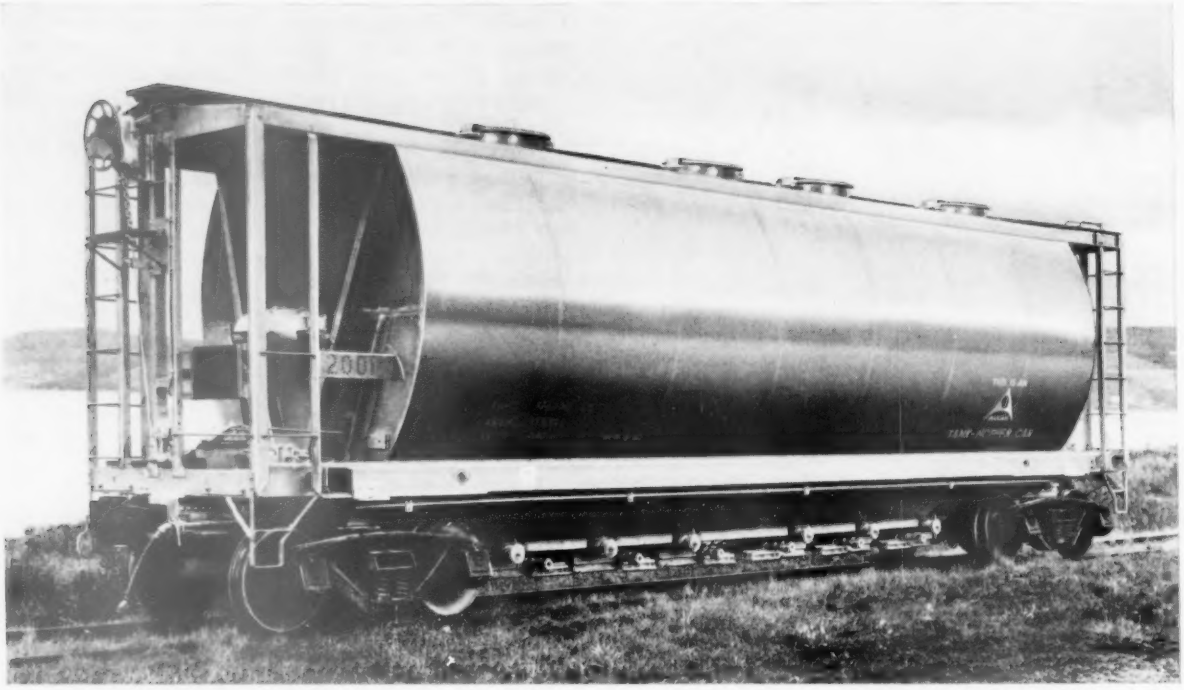
Without these, defense efforts are jeopardized, recovery from nuclear attack, if one comes, is made immeasurably more difficult. A disconnected country is no country.

The points outlined on these pages are not all that are needed to bolster this country's power to withstand threats. They are merely the more urgent needs—necessary first steps to weeding out weak spots in U.S. transportation.

These corrections involve major revisions in national policy. Accumulated legal debris in transportation must be swept away and the job of redirection begun. America loses more ground with every day's delay. Survival of the nation compels quick action.

'SOON' MAY BE TOO LATE

Please see the Action Page (p. 128) ▶



The Alcan Aluminum Tank-Hopper Car

Here's why Aluminium Limited should be consulted on any aluminum car-building program

Over 12 years ago Aluminium Limited engineers applied practical experience in railway car construction by designing the first full-scale, heavy-duty aluminum boxcar. This was before machine-welding of aluminum was known, but even then it chopped 12,000 lbs. from conventional car weight. This car is still in service.

In the subsequent years, teams of Aluminium Limited engineers and technicians have worked continuously with car builders and railroad men . . . helping to create *lightweight subway cars* that show substantially reduced operating costs . . . developing *corrosion-resistant mine cars* that last many years longer . . . giving the railway industry a whole series of successful firsts, such as:

In 1949—The First Aluminum Boxcar (riveted construction).

In 1955—The First Welded Aluminum Open Hopper Car.

In 1956—The First A.A.R. Type Welded Aluminum Centre Sill.

In 1958—The First All-Aluminum Refrigerator Car.

In 1960—The First Aluminum Tank-Hopper Car.

Aluminium Limited is world-wide, with mines, smelters and research facilities in many world areas. These widespread facilities have allowed constant interchange of research, engineering and technical methods into the most extensive pool of aluminum data now available.

Technical teams on the job! All of this experience and know-how would do you little good, if you couldn't tap it! That is why teams of Alcan engineers, designers and welding technicians *are available for consultation trips to apply up-to-the-minute technical service to your projects.*

When you are considering the many cost-reducing properties of aluminum cars, Aluminium Limited probably can save you considerable time and research expense.

Aluminium Limited

ALUMINIUM LIMITED SALES, INC.,
111 WEST 50th STREET, NEW YORK 20, NEW YORK

ALCAN

NOW...brush killed while nature sleeps

NEW: Dormant Cane Broadcast with Diamond Line Rider formulations
RESULT: Lower costs, extended application season, less risk of crop damage

Three years of commercial and semi-commercial testing are over. The answer is, "Yes." The Diamond Dormant Cane Broadcast method of applying 2, 4-D and 2, 4, 5-T has been proven. The advantages can be put into effect.

This new method can now supersede stem-foliage and basal treatment. Dormant Cane Broadcast treatment can be applied over the entire woody plant from October to February. You use low-pressure sprays—you need only half the time required in basal treatment.

Diamond Line Rider formulations are the proven materials through three years of experience—as the best materials, they do the best job. Send for technical bulletin on "Dormant Cane Broadcast." Diamond Alkali Company, Cleveland 14, Ohio.

New York Central Railroad designed this truck for on-track, off-track use. Under observation by a Diamond technical representative, it is spraying dormant cane killer along the Southern District right-of-way. This method extends brush-killing time 6 to 8 months by allowing winter spraying.

DiamondChemicals®

COBRA® SHOE

Satisfied users summarize its particularly important advantages

"With all our motive power equipped with Cobra Shoes, our experience has been much better than we anticipated. Wheel life has been extended and we have eliminated wheel damage from braking."

"We have eliminated flat spots and thermal cracking of wheel treads since we installed Cobra Shoes."

"Cobra Shoe life and improved wheel performance have been a major factor in the over-all economies realized in the operation of our new Push-Pull trains."

These typical statements were made by men who have evaluated the important advantages of Cobra Shoes for several years. They're just some of the reasons why more and more railroads are specifying Cobra Shoes for new equipment, and modifying existing equipment to include Cobra Shoes.

Today 158 railroads are using Cobra Shoes on:

Freight Cars.....6086 (2003 Piggybacks)
Passenger Cars.....2300
Locomotives.....1164
Total Units.....9550

Why Cobra Shoe applications are expanding:

- Cobra Shoes last up to 5 times longer than cast iron shoes
- Wheel life can be doubled when Cobra Shoes are used

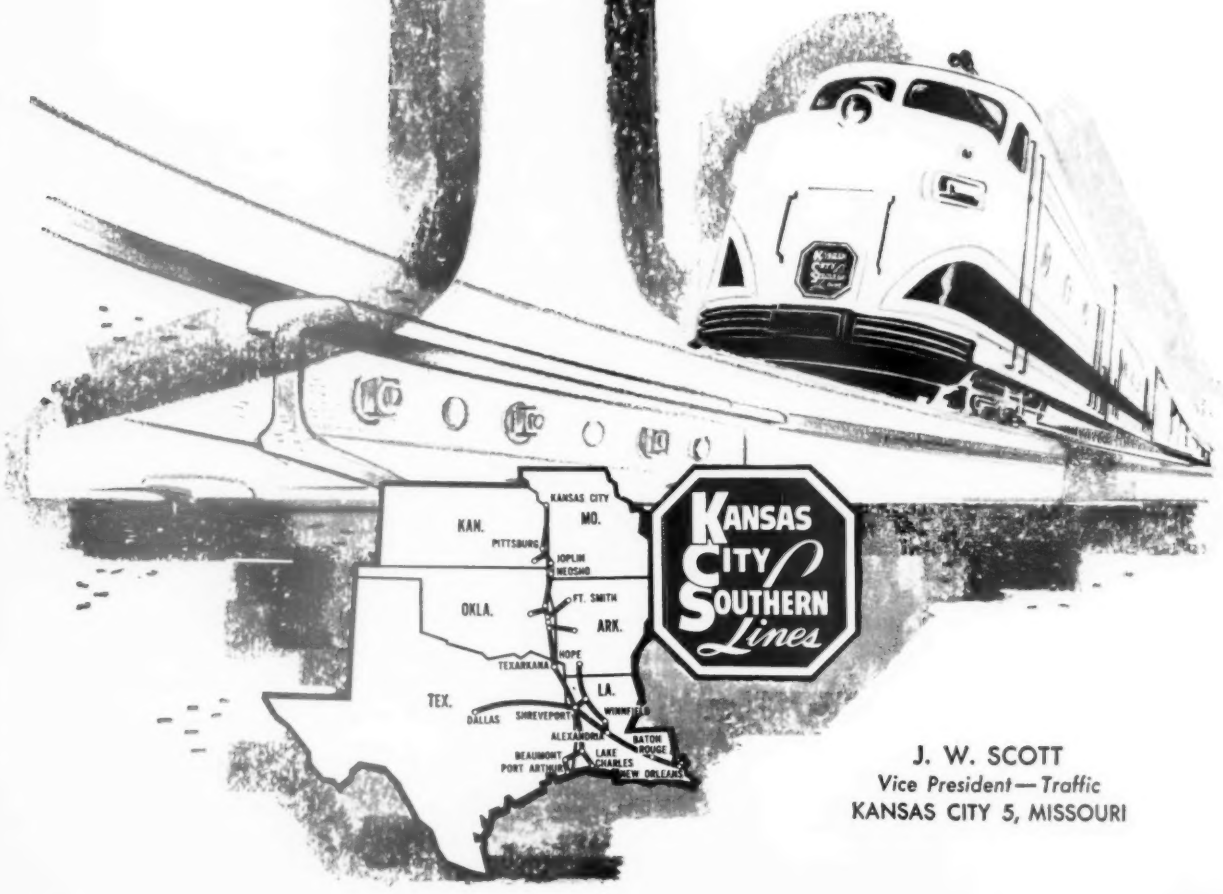
The COBRA® Shoe

... a product of the combined research facilities of WESTINGHOUSE AIR BRAKE COMPANY, Specialists in Braking; JOHNS-MANVILLE CORPORATION, Specialists in Friction Material

RAILROAD FRICTION PRODUCTS CORPORATION, Wilmerding, Pennsylvania

BIG RAIL

BIG RAIL and deep-ballasted roadbed are part of the solid physical assets of Kansas City Southern Lines—tools in the hands of an organization trained to give the fast, smooth transportation service shippers and travelers are privileged to expect!



J. W. SCOTT
Vice President—Traffic
KANSAS CITY 5, MISSOURI

What Are Big RR Questions?

In its last appearance, this department raised several questions that readers felt should be discussed by railroad men now. Here are some more questions offered for discussion, plus comment on a previous question.—Editor.

To the Question and Answer Editor:

Why not try to teach the Golden Rule, "Do unto others as you would have others do unto you." to receivers of freight?

There is countless money spent by railroads and also by plants to clean cars left dirty by receivers of freight. There is also loss of revenue due to short lines not being able to spot clean cars for loading, [since many short lines] do not have the facilities to clean cars. Not only do some plants not clean the damage and waste from cars, they get rid of their plant trash by dumping it into cars they have received.

This can also mean loss of revenue to the line that owns the car, for in lots of instances it will travel many empty miles to get back on line to be cleaned, when if it had been cleaned it might have been returned home as a load.—*Roy H. McBride, East St. Louis, Ill.*

Who Needs Standard Cars?

To the Question and Answer Editor:

During my six years with the Illinois Central, like most other young employees, I have been particularly interested in TOFC service and special equipment, especially damage-reducing cars.

Reading articles, such as "NYC Introduces New 'Mark III' Flexi-Van Design" [RA, June 12, p. 16], raises the question in my mind as to the reason various railroad companies do not cooperate more closely in the formulation of a standard design for TOFC and containerization equipment.

Since one of the railroads' main assets is interchangeability of equipment, close cooperation in building all equipment to a standard design is certainly most practical.

I am particularly disturbed at the lack of interest on the part of railroads in building enough damage-reducing cars to provide an adequate supply. I have seen several articles recently pertaining to the building of standard box cars. It seems to me as though not another single standard box car should be built until the damage-reducing box car shortage has been largely eliminated.

My questions, therefore, are: Why don't railroads cooperate more closely in the designing of container and TOFC equipment, and why do railroads continue to build standard box cars when shippers are complaining so bitterly about the lack of damage-reducing cars?—*Lonny G. Jones, apprentice, Illinois Central.*

Reduce Empty Car Mileage?

To the Question and Answer Editor:

I have worked for the Baltimore & Ohio for over 45 years. When I first entered the service it was the chief concern of superintendents and those of higher rank to reduce empty car mileage as much as possible. In some of the subsequent years, especially during the 1929-1937 recession, their net was small but they continued to earn enough to keep their property and rolling stock in fair condition. Today the empty mileage has doubled as the result of the numerous cars assigned for certain commodities that must be returned empty because, either they are not suitable for other commodities or their previous load had contaminated them for use in a diversified commodity traffic, not similar to the one most recently unloaded.

A forum for railroaders who want to explore questions of importance to their industry, this department welcomes both questions and answers from readers at all levels of responsibility in the industry and associated fields. We'll pay $10 to any reader submitting a question that forms the basis for a column discussion. Address correspondence to Question and Answer Editor, Railway Age, 30 Church St., New York 7, N. Y.

I observed recently a train of 100 cars, of which only 27 were loads; all others were assigned cars such as covered hoppers, specific type tanks, etc., that could not be loaded.

It is my belief, that [the practice of adding] more and more assigned cars to hold or capture loading has reached the point where it now presents the major difference between retaining some net revenue and spending it all on the added empty mileage so necesary to maintain such business.

I would like to see a discussion of this.—*H. F. Lydick, terminal trainmaster, Baltimore & Ohio.*

Piggyback for Private Autos?

To the Question and Answer Editor:

In addition to the answers to the question of hauling private autos, set forth in Railway Age of October 23, let me add that one of the ideal test grounds is not yet available. I feel that once a rail line is open to Alaska, either with eventual completion of Pacific Great Eastern or in some other way, to haul autos on the same trains as the owners are riding between the states and Alaska would be an ideal test.

Granted that such a chance may be some years off, but if no other test area is found, I suggest this one. Even if the Alaskan rail connection is made after possible tests elsewhere, this routing might provide a natural for those who desired to forego the Alcan Highway journey in preference to rail travel, comfortable overnight lodging while moving, et al, and still have their own autos at destination.—*Pete Roehm, Portland, Ore.*

To the Question and Answer Editor:

The letters you published in comment on the "piggyback for private autos" train [RA, Oct. 9, p. 16] did not stress a serious fault in the original proposal —the rest rooms. If such trains ever go into operation, any patrons who have to listen to, say, their first-grade child holler to go to the bathroom until they reach a division point two hours later, are going to be anti-railroad for life! The fundamental issue was most effectively stated in the late 1930's by a famous railroad anti-bus advertisement headlined "I like to go when I want to go." Either Mr. Edson is going to have to re-engineer his train or else redesign the human body.—*William S. Greever, Moscow, Idaho.*

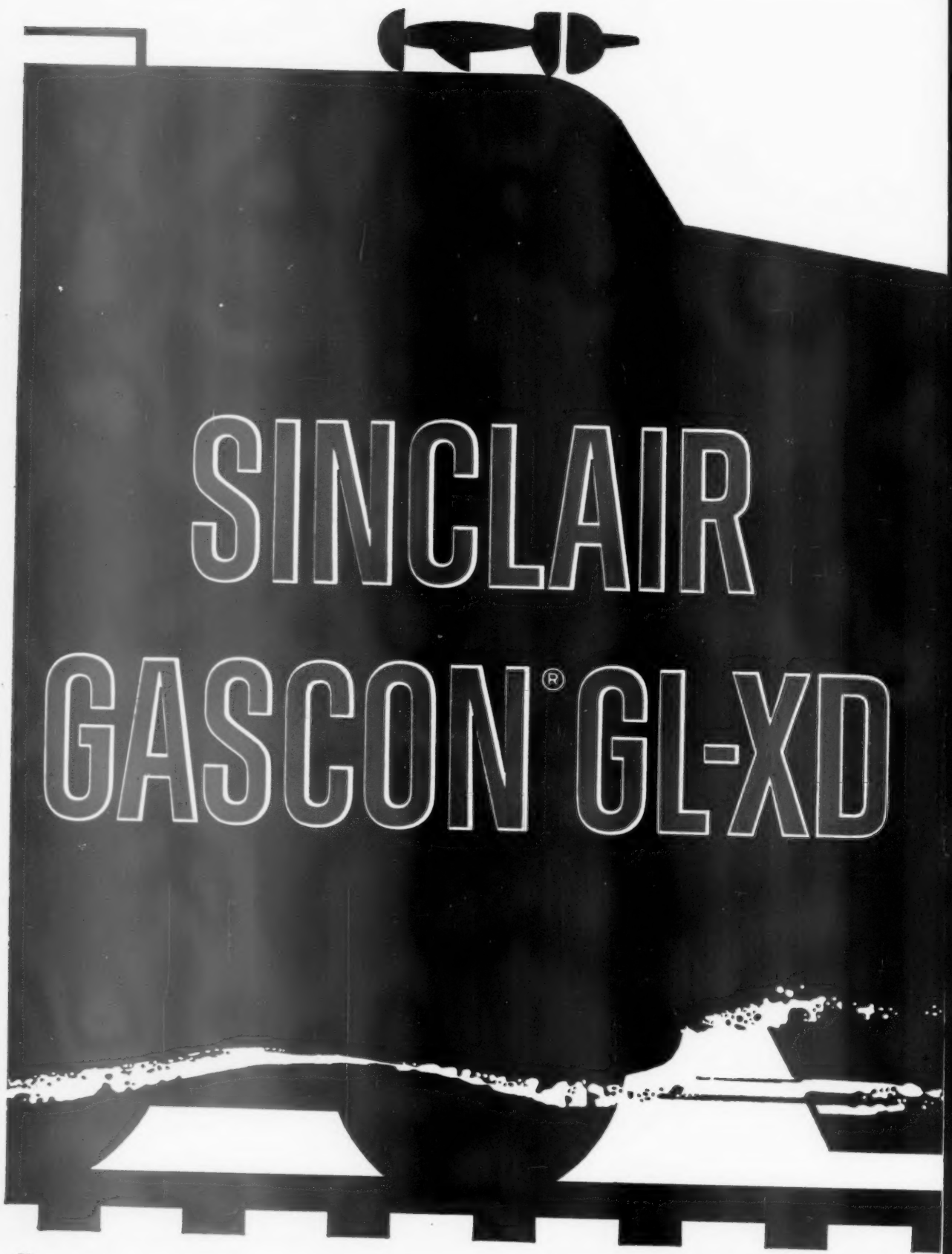
Freight Operating Statistics of Large Railroads—Selected Items

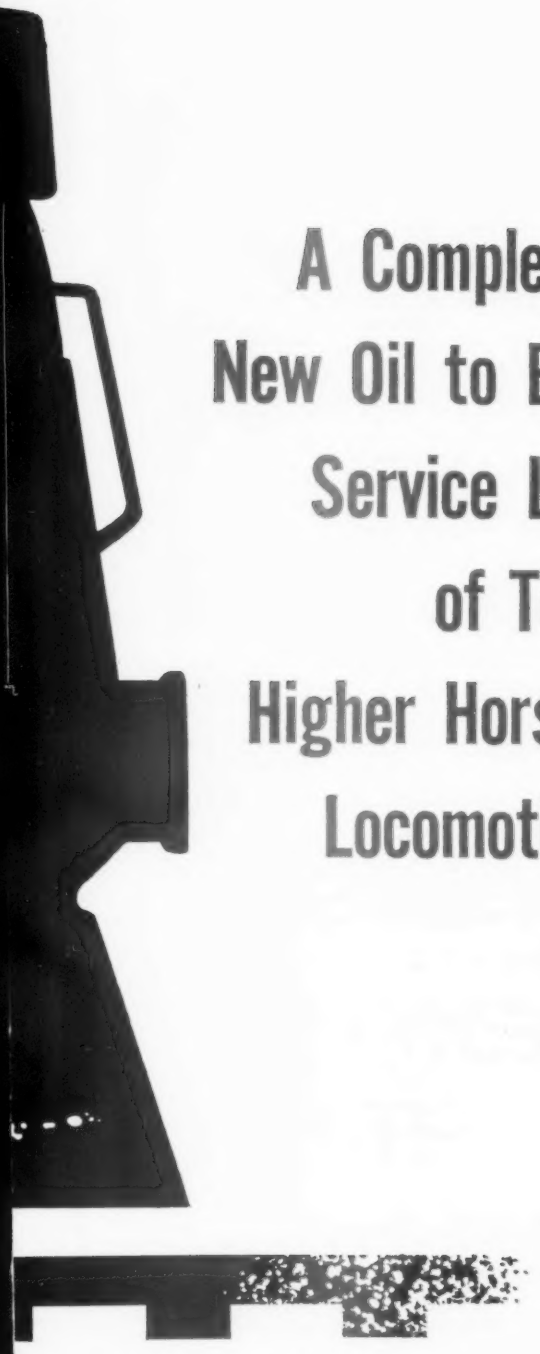
	Region, Road and Year		Miles of road operated	Locomotive Miles: Train miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (*thousands*)	Car Miles: Per cent loaded	Ton-miles (*thousands*): Gross excl.locos & tenders	Ton-miles (*thousands*): Net rev. and non-rev	Road-locos. on lines: Serviceable: Unstored	Road-locos. on lines: Serviceable: Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region	Boston & Maine	1961	1,547	649,931	652,900	12,065	23,037	58.9	1,749,054	725,706	76	3	13	14.1
		1960	1,549	664,423	665,273	8,572	23,486	59.7	1,702,311	669,630	79	2	12	12.9
	Maine Central	1961	937	241,223	241,309	4,136	6,982	57.1	523,490	206,307	28	..	3	9.7
		1960	936	247,162	247,592	4,081	7,319	58.5	537,472	213,147	25	..	6	19.4
	N. Y., N. H. & Hartfd	1961	1,717	662,326	662,370	32,304	25,296	60.6	1,759,975	705,308	62	..	18	22.5
		1960	1,739	773,808	776,908	44,241	27,675	61.3	1,897,974	746,024	65	..	12	15.6
Great Lakes Region	Delaware & Hudson	1961	763	449,398	451,713	2,339	20,562	61.2	1,510,264	732,267	30	..	12	28.6
		1960	763	487,121	490,925	4,992	23,513	64.7	1,623,922	806,328	33	2	6	14.6
	Erie-Lackawanna*	1961	3,077	2,262,006	2,277,681	55,632	110,496	65.2	7,155,153	2,763,702	236	6	10	4.0
		1960	3,179	2,236,807	2,259,136	65,539	108,886	65.5	7,291,927	2,898,476	221	2	14	5.9
	Grand Trunk Western	1961	946	524,551	524,806	3,116	18,019	57.7	1,310,997	514,625	32	11	1	2.3
		1960	951	613,598	613,693	3,417	20,652	57.9	1,471,620	561,343	41	..	2	4.7
	Lehigh Valley	1961	1,114	507,126	510,972	8,199	21,397	62.7	1,505,176	670,171	31	..	3	8.8
		1960	1,114	543,320	549,090	13,034	23,390	63.4	1,645,653	740,103	31	..	3	8.8
	New York Central	1961	10,198	5,472,571	5,494,703	270,827	222,533	56.1	18,147,001	7,660,847	424	10	63	12.7
		1960	10,326	6,121,460	6,153,216	262,198	248,930	56.0	20,115,874	8,358,934	440	12	60	11.7
	New York, Chic. & St. L	1961	2,155	1,565,274	1,565,274	14,150	66,536	61.6	5,026,122	2,175,108	100	2	4	3.8
		1960	2,155	1,817,463	1,817,463	15,646	78,493	60.3	5,951,668	2,537,844	101	29	11	7.8
	Pitts. & Lake Erie	1961	220	109,702	109,702	....	4,956	57.1	497,063	288,157	13	7	1	4.8
		1960	220	150,615	150,615	....	6,697	62.1	650,308	391,057	15	..	2	11.8
	Wabash	1961	2,410	1,122,394	1,122,519	12,092	54,060	62.0	3,872,031	1,564,573	114	..	..	..
		1960	2,400	1,183,488	1,184,239	11,134	56,678	62.1	4,028,387	1,625,696	111	..	4	3.5
Central Eastern Region	Baltimore & Ohio	1961	5,791	3,543,144	3,739,431	191,064	144,785	58.5	12,373,512	5,895,704	350	..	49	12.3
		1960	5,793	3,928,395	4,170,604	271,139	164,527	58.5	13,927,122	6,650,885	359	40	40	9.1
	Bessemer & Lake Erie	1961	203	90,365	86,767	56	3,225	58.2	333,474	194,331	9	7	..	..
		1960	203	154,271	158,914	400	6,611	62.5	758,295	490,961	13	..	..	..
	Central RR Co. of New Jersey	1961	592	303,926	307,706	15,059	11,199	60.6	922,418	487,898	63	2	5	7.1
		1960	593	316,515	320,201	16,211	11,623	63.6	919,715	487,583	63	3	..	..
	Chicago & Eastern Ill	1961	863	273,499	273,499	7,156	14,094	60.3	1,161,055	594,126	28	..	4	12.5
		1960	863	298,251	298,251	5,639	15,751	60.4	1,268,431	635,911	27	..	5	15.6
	Elgin, Joliet & Eastern	1961	205	140,290	143,105	....	5,396	60.5	452,540	244,674	42	6	..	..
		1960	205	172,048	173,523	....	5,776	60.0	497,204	272,105	41	3	4	8.3
	Pennsylvania System	1961	9,771	6,785,627	7,077,655	380,297	287,549	61.0	22,342,630	10,321,771	648	26	126	15.8
		1960	9,809	7,794,692	8,209,853	516,481	332,238	60.6	25,966,887	12,097,884	699	1	69	9.0
	Reading	1961	1,293	736,705	738,204	18,375	27,491	55.3	2,482,296	1,227,122	133	17	13	8.0
		1960	1,301	802,111	804,741	23,870	30,680	58.1	2,691,712	1,405,133	126	8	26	16.3
	Western Maryland	1961	841	368,623	379,666	19,117	14,936	59.1	1,366,085	745,469	39	3	1	2.3
		1960	841	408,741	422,950	22,610	18,017	62.8	1,614,140	913,819	41	..	2	4.7
Pocahontas Region	Chesapeake & Ohio	1961	5,093	3,094,700	3,099,247	55,739	139,973	54.8	12,590,829	6,657,024	580	..	52	8.2
		1960	5,060	3,527,857	3,531,052	62,483	164,932	56.1	14,835,074	8,073,482	586	..	43	6.8
	Norfolk & Western	1961	2,725	1,933,885	1,971,294	76,441	105,072	53.8	10,586,962	5,716,278	159	..	9	5.4
		1960	2,722	2,229,967	2,274,949	82,132	115,740	54.5	11,538,455	6,240,007	165	4	9	5.1
	Rich., Fred. & Potomac	1961	110	120,339	120,339	2,296	7,457	60.5	536,031	219,920	15	..	..	..
		1960	110	121,337	121,337	2,558	7,822	60.5	550,446	218,788	15	..	..	..
Southern Region	Atlantic Coast Line	1961	5,561	2,001,504	2,001,504	19,944	75,219	57.0	5,864,034	2,663,522	108	19	..	..
		1960	5,563	2,145,292	2,145,292	21,774	80,829	57.4	6,300,464	2,873,541	119	13	2	1.5
	Central of Georgia	1961	1,712	551,203	551,203	6,478	20,508	61.3	1,654,049	813,172	34	..	2	5.6
		1960	1,712	547,597	547,597	6,289	22,039	63.2	1,720,720	851,721	34	..	1	2.9
	Florida East Coast	1961	572	247,590	247,590	....	8,551	51.2	708,569	255,562	35	4	10	20.4
		1960	572	276,206	276,206	....	10,503	51.8	842,360	297,522	45	6	8	13.6
	Gulf, Mobile & Ohio	1961	2,715	780,620	780,620	34	42,914	65.7	3,221,408	1,567,291	87	..	4	4.4
		1960	2,717	773,222	773,222	38	42,476	65.0	3,078,901	1,461,387	80	..	11	12.1
	Illinois Central	1961	6,466	2,648,633	2,648,633	67,667	121,272	61.3	9,115,666	4,283,059	151	..	5	3.2
		1960	6,500	2,874,653	2,874,653	75,721	127,374	60.4	9,523,215	4,367,617	170	6	62	26.1
	Louisville & Nashville	1961	5,666	2,644,818	2,647,656	44,898	98,729	59.1	8,024,143	3,900,014	168	..	2	1.2
		1960	5,666	2,808,486	2,812,912	46,101	109,339	59.4	8,861,351	4,365,953	167	..	2	1.2
	Seaboard Air Line	1961	4,123	1,676,651	1,676,651	6,745	70,079	57.5	5,681,321	2,565,923	121	..	6	4.7
		1960	4,133	1,811,964	1,811,964	7,392	74,276	57.6	5,973,138	2,736,536	118	..	6	4.8
	Southern	1961	6,242	2,476,996	2,477,376	29,365	111,437	60.4	8,326,113	3,803,640	193	5	7	3.4
		1960	6,242	2,536,692	2,537,062	26,360	117,820	62.5	8,478,462	3,757,560	200	4	4	1.9
Northwestern Region	Chicago & North Western	1961	10,715	2,673,432	2,673,437	26,396	105,564	62.0	7,973,422	3,416,222	192	..	17	8.1
		1960	10,635	2,804,555	2,804,561	31,714	107,289	60.5	8,166,099	3,556,508	235	9	15	5.8
	Chicago Great Western	1961	1,437	380,927	380,927	468	19,308	65.1	1,399,361	658,527	25	..	2	7.4
		1960	1,437	401,730	401,730	713	20,450	65.1	1,480,609	695,796	25	..	2	7.4
	Chi., Milw., St. P. & Pacific	1961	10,554	2,218,977	2,234,510	24,022	100,865	62.6	7,401,722	3,298,961	155	15	3	1.7
		1960	10,590	2,348,570	2,369,807	25,825	106,569	62.8	7,725,940	3,412,054	155	18	2	1.1
	Duluth, Missabe & Iron Range	1961	572	162,692	162,898	605	7,266	51.3	810,124	488,440	53	20	..	..
		1960	575	328,649	329,286	865	17,133	50.2	1,882,964	1,140,105	68	29	1	1.0
	Great Northern	1961	8,263	2,553,870	2,566,077	61,855	109,634	64.8	8,105,060	3,780,592	191	9	6	2.9
		1960	8,300	2,735,111	2,747,729	75,118	121,102	63.3	9,256,773	4,467,350	288	5	4	1.3
	Soo Line†	1961	4,698	1,126,500	1,127,762	1,225	41,067	64.7	2,894,547	1,352,730	98	9	3	2.7
		1960	4,712	1,135,121	1,136,802	1,066	40,253	65.8	2,804,307	1,277,673	113	..	6	5.0
	Northern Pacific	1961	6,505	2,096,118	2,111,552	23,260	90,356	66.0	6,235,142	2,823,713	247	10	7	2.7
		1960	6,533	2,280,414	2,300,792	31,690	97,282	64.5	6,784,510	3,021,112	251	4	10	3.8
	Spokane, Portland & Seattle	1961	935	400,518	400,518	2,898	17,578	70.5	1,205,795	567,601	29	..	..	..
		1960	935	413,028	413,028	3,545	18,204	72.3	1,229,510	588,097	28	..	..	..
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1961	12,997	7,384,342	7,558,751	86,681	329,534	60.7	25,179,663	9,747,542	715	5	21	2.8
		1960	12,970	8,470,943	8,807,142	131,019	356,840	61.1	26,553,287	10,222,272	692	..	35	4.8
	Chic., Burl. & Quincy	1961	8,590	2,951,198	2,946,406	74,349	127,279	63.3	9,129,828	4,063,968	128	4	5	3.6
		1960	8,625	2,959,697	2,951,082	72,024	126,356	64.6	8,812,208	3,881,700	138	2	52	27.1
	Chic., Rock I. & Pac	1961	7,834	2,607,676	2,617,127	3,963	109,873	59.0	8,598,614	3,483,577	204	..	2	1.0
		1960	7,525	3,000,033	3,016,295	5,239	117,549	59.3	8,867,074	3,535,566	202	..	4	1.9
	Denver & R. G. Western	1961	2,128	782,438	828,393	79,097	38,590	72.1	2,805,616	1,373,999	79	4	12	12.6
		1960	2,128	855,821	904,611	79,266	42,221	74.1	2,921,487	1,424,799	78	5	10	10.8
	Southern Pacific	1961	7,894	6,545,137	6,801,156	395,038	296,983	63.0	21,737,249	9,142,231	716	3	28	3.7
		1960	7,914	6,640,426	6,907,889	424,832	306,775	63.3	21,886,673	9,004,736	746	1	24	3.1
	Union Pacific	1961	9,717	5,636,042	5,647,402	72,504	276,209	65.0	19,035,466	8,178,782	319	61	49	11.4
		1960	9,747	5,644,416	5,714,908	149,536	280,661	64.0	19,207,722	8,038,565	332	46	73	16.2
	Western Pacific	1961	1,188	707,039	723,721	68,719	30,677	67.6	2,130,182	977,977	50	1	4	7.3
		1960	1,188	814,564	833,600	70,170	32,425	68.4	2,176,838	965,903	47	..	5	9.6
Southwestern Region	Kansas City Southern	1961	889	339,902	339,966	476	21,654	65.7	1,680,663	777,580	22	..	1	4.3
		1960	886	359,345	359,422	395	22,833	65.0	1,736,011	813,122	22	..	1	4.3
	Louisiana & Arkansas	1961	746	205,104	205,104	84	10,694	63.3	863,749	417,153	13	..	..	..
		1960	746	229,349	229,349	46	11,010	62.2	889,733	422,421	17	..	..	..
	Mo.-Kans.-Texas Lines	1961	2,883	666,630	666,630	5,577	31,410	62.6	2,444,924	1,113,713	76	..	..	..
		1960	2,915	736,225	736,225	6,944	31,961	62.4	2,381,271	1,047,454	72	..	1	1.4
	Missouri Pacific	1961	9,361	3,304,449	3,304,449	24,191	153,908	61.9	11,600,458	5,336,548	214	25	16	6.3
		1960	9,413	3,502,984	3,502,984	25,322	106,488	63.8	11,634,401	5,299,278	217	..	10	4.4
	St. Louis-San Francisco	1961	4,505	1,767,388	1,767,388	16,418	67,711	66.9	4,727,664	2,250,438	91	..	16	15.0
		1960	4,505	1,780,016	1,780,016	16,703	70,610	67.4	4,863,982	2,296,824	103	4	13	10.8
	St. Louis Southwestern Lines	1961	1,554	1,035,526	1,035,526	8,393	48,009	67.6	3,240,617	1,448,601	49	..	1	2.0
		1960	1,554	1,007,353	1,007,353	11,770	47,960	70.5	3,128,987	1,398,703	50	..	1	2.0
	Texas & New Orleans	1961	4,084	1,750,871	1,750,871	99	81,174	63.2	6,034,538	2,684,032	136	..	2	1.4
		196	4,078	1,727,588	1,727,588	30	82,583	66.0	5,998,807	2,741,060	139	..	1	.7
	Texas & Pacific	1961	1,819	737,239	737,239	6,745	34,422	59.2	2,705,862	1,058,729	36	..	2	5.3
		1960	1,819	836,772	836,772	7,839	38,231	61.8	2,883,221	1,092,242	36	..	2	5.3

for the Second Quarter 1961 Compared with Second Quarter 1960

Region, Road and Year		Freight cars on line: Home	Freight cars on line: Foreign	Freight cars on line: Total	Freight cars on line: Per Cent B.O.	G.t.m.per train-hr. excl.locos and tenders	G.t.m.per train-mi. excl.locos and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Cars-miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco. per day
New Eng. Region	Boston & Maine	1961	2,139	6,194	8,333	2.4	42,218	2,696	1,118	31.5	947	51.0	5,155	15.7	88.3
		1960	2,292	7,342	9,634	3.9	40,569	2,566	1,010	28.5	749	44.0	4,751	15.8	88.2
	Maine Central	1961	2,757	2,211	4,968	7.6	30,698	2,177	858	29.5	445	26.4	2,420	14.1	105.4
		1960	2,744	2,111	4,855	7.9	32,090	2,180	864	29.1	467	27.4	2,502	14.8	102.1
	N. Y., N. H. & Hartfd	1961	4,364	12,625	16,989	6.3	41,566	2,657	1,065	27.9	461	27.2	4,514	15.6	115.6
		1960	4,478	13,395	17,873	8.1	39,584	2,453	964	27.0	448	27.2	4,714	16.1	137.8
Great Lakes Region	Delaware & Hudson	1961	5,269	3,131	8,400	13.8	63,390	3,379	1,638	35.6	894	41.0	10,546	18.9	124.5
		1960	4,587	4,178	8,765	8.3	62,533	3,351	1,664	34.3	1,029	46.4	11,613	18.8	151.8
	Erie-Lackawanna*	1961	18,009	19,383	37,392	14.1	67,421	3,192	1,233	25.0	813	49.9	9,870	21.3	111.6
		1960	16,662	21,887	38,549	12.3	66,204	3,292	1,309	26.6	804	46.1	10,019	20.3	119.4
	Grand Trunk Western	1961	5,366	5,564	10,930	8.0	62,542	2,501	982	28.6	512	31.1	5,978	25.0	137.2
		1960	5,972	6,448	12,420	7.4	57,476	2,404	917	27.2	495	31.4	6,486	24.0	159.8
	Lehigh Valley	1961	7,480	7,078	14,558	21.0	64,825	2,990	1,331	31.3	483	24.5	6,611	21.8	185.3
		1960	6,880	7,448	14,328	16.5	63,723	3,062	1,377	31.6	542	27.0	7,301	21.0	201.2
	New York Central	1961	63,226	70,259	133,485	8.5	61,412	3,345	1,412	34.4	652	33.7	8,255	18.5	146.3
		1960	59,432	69,488	128,920	10.2	59,874	3,318	1,379	33.6	705	37.5	8,896	18.2	157.4
	New York, Chic. & St. L	1961	7,725	14,854	22,579	16.5	60,047	3,257	1,409	32.7	1,100	54.6	11,092	18.7	186.4
		1960	11,421	14,103	25,524	12.6	58,921	3,320	1,416	32.3	1,139	58.4	12,941	18.0	160.7
	Pitts. & Lake Erie	1961	7,801	3,221	11,022	11.5	71,768	4,534	2,628	58.1	265	8.0	14,393	15.8	62.1
		1960	7,737	4,862	12,599	11.7	67,049	4,338	2,609	58.4	341	9.4	19,533	15.5	104.2
	Wabash	1961	7,158	11,532	18,690	7.2	86,901	3,450	1,394	28.9	969	54.0	7,134	25.2	115.3
		1960	9,572	9,935	19,507	9.0	82,256	3,415	1,378	28.7	964	54.1	7,444	24.2	119.8
Central Eastern Region	Baltimore & Ohio	1961	56,743	40,481	97,224	20.4	58,902	3,559	1,696	40.7	684	28.7	11,188	16.9	112.1
		1960	61,637	30,001	91,638	18.4	57,656	3,597	1,718	40.4	773	32.7	12,616	16.3	113.1
	Bessemer & Lake Erie	1961	3,279	1,487	4,766	8.4	61,267	4,018	2,341	60.3	343	9.8	10,520	16.6	68.2
		1960	6,761	1,885	8,646	8.8	75,079	5,286	3,422	74.3	745	16.0	26,577	15.3	142.1
	Central RR Co. of New Jersey	1961	3,869	9,583	13,452	14.8	44,704	3,130	1,656	43.6	389	14.7	9,057	14.7	76.4
		1960	4,327	11,111	15,438	17.7	42,762	3,025	1,604	41.9	362	13.6	9,036	14.7	77.8
	Chicago & Eastern Ill	1961	2,746	3,263	6,009	12.3	74,241	4,287	2,194	42.2	1,087	42.8	7,565	17.5	100.1
		1960	3,793	3,168	6,961	13.5	72,735	4,289	2,151	40.3	1,040	42.6	8,097	17.2	108.0
	Elgin, Joliet & Eastern	1961	7,466	5,590	13,056	11.1	25,445	3,321	1,796	45.3	208	7.6	13,116	7.9	45.9
		1960	7,718	5,536	13,254	5.9	23,125	2,977	1,629	47.1	207	7.3	14,586	8.0	58.6
	Pennsylvania System	1961	116,706	72,248	188,954	16.1	59,105	3,372	1,558	35.9	605	27.6	11,608	18.0	114.2
		1960	108,512	81,495	190,007	13.3	57,848	3,436	1,601	36.4	687	31.1	13,553	17.4	135.7
	Reading	1961	13,550	16,074	29,624	12.2	53,604	3,369	1,666	44.6	449	18.2	10,429	15.9	65.6
		1960	14,913	13,539	28,452	14.6	51,870	3,356	1,752	45.8	492	18.5	11,869	15.5	70.1
	Western Maryland	1961	7,595	2,112	9,707	12.4	55,126	3,777	2,061	49.9	744	25.2	9,741	14.9	114.4
		1960	7,685	2,980	10,665	7.5	56,718	4,003	2,266	50.7	972	30.5	11,941	14.4	127.5
Pocahontas Region	Chesapeake & Ohio	1961	63,698	22,531	86,229	5.9	70,402	4,087	2,161	47.6	837	32.1	14,364	17.3	59.5
		1960	64,719	29,666	94,385	5.6	78,520	4,227	2,300	49.0	962	35.0	17,534	18.7	67.6
	Norfolk & Western	1961	51,922	8,427	60,349	1.9	95,400	5,596	3,021	54.4	993	33.9	23,052	17.4	156.0
		1960	52,478	8,299	60,777	1.6	91,504	5,279	2,855	53.9	1,144	38.9	25,192	17.7	151.2
	Rich., Fred., & Potomac	1961	129	1,082	1,211	1.6	107,745	4,464	1,831	29.5	1,992	111.6	21,970	24.2	94.3
		1960	161	1,107	1,268	2.3	104,787	4,541	1,805	28.0	1,926	113.8	21,857	23.1	95.1
Southern Region	Atlantic Coast Line	1961	19,908	14,163	34,071	6.6	53,488	2,938	1,334	35.4	880	43.6	5,263	18.3	195.1
		1960	19,391	15,892	35,283	4.4	50,566	2,947	1,344	35.6	886	43.4	5,676	17.2	202.4
	Central of Georgia	1961	4,834	4,803	9,637	8.9	50,111	3,013	1,481	39.7	911	37.5	5,220	16.7	185.9
		1960	3,961	4,925	8,886	4.3	54,880	3,146	1,557	38.6	1,040	42.6	5,467	17.5	193.0
	Florida East Coast	1961	683	2,176	2,859	.8	44,117	2,862	1,032	29.9	792	51.7	4,910	15.4	56.6
		1960	636	2,965	3,601	.7	45,427	3,050	1,077	28.3	793	54.1	5,716	14.9	61.9
	Gulf, Mobile & Ohio	1961	7,569	9,116	16,685	6.4	79,445	4,129	2,009	36.5	1,028	42.8	6,344	19.3	102.5
		1960	7,588	9,741	17,329	6.4	76,666	3,983	1,891	34.4	957	42.8	5,911	19.3	101.3
	Illinois Central	1961	27,353	23,767	51,120	5.9	63,749	3,465	1,628	35.3	933	43.1	7,279	18.5	189.3
		1960	27,498	22,295	49,793	2.4	61,848	3,336	1,530	34.3	990	47.8	7,374	18.7	146.6
	Louisville & Nashville	1961	42,910	15,987	58,897	12.4	54,681	3,042	1,478	39.5	749	32.1	7,564	18.0	191.0
		1960	36,236	16,920	53,156	11.6	57,480	3,170	1,562	39.9	917	38.7	8,468	18.2	203.2
	Seaboard Air Line	1961	18,210	11,965	30,175	4.4	62,846	3,451	1,559	36.6	933	44.4	6,839	18.5	168.6
		1960	17,433	13,076	30,509	3.4	58,935	3,361	1,540	36.8	997	47.0	7,276	17.9	188.9
	Southern	1961	18,994	30,264	49,258	3.1	60,127	3,366	1,538	34.1	823	39.9	6,696	17.9	150.1
		1960	21,062	29,564	50,626	3.7	57,122	3,351	1,485	31.9	798	40.1	6,615	17.1	150.5
Northwestern Region	Chicago & North Western	1961	24,775	28,832	53,607	8.7	51,594	2,990	1,281	32.4	720	35.9	3,504	17.3	146.8
		1960	24,017	28,712	52,729	8.5	49,311	2,923	1,273	33.1	718	35.8	3,675	16.9	128.7
	Chicago Great Western	1961	2,141	3,697	5,838	4.0	69,571	3,683	1,733	34.1	1,209	54.4	5,036	18.9	166.7
		1960	2,275	4,075	6,350	3.8	67,133	3,691	1,735	34.0	1,128	50.9	5,321	18.2	177.5
	Chic., Milw., St. P. & Pacific	1961	30,088	21,988	52,076	7.2	70,001	3,344	1,491	32.7	704	34.4	3,435	21.0	155.5
		1960	30,522	20,077	50,599	5.7	66,656	3,298	1,457	32.0	747	37.2	3,541	20.3	162.1
	Duluth, Missabe & Iron Range	1961	13,079	857	13,936	1.4	79,191	5,346	3,223	67.2	384	11.1	9,384	15.9	29.2
		1960	12,813	927	13,740	1.2	104,129	6,175	3,739	66.5	924	27.7	21,789	18.2	49.1
	Great Northern	1961	26,245	19,556	45,801	4.1	69,014	3,202	1,494	34.5	959	42.9	5,028	21.7	125.0
		1960	26,706	16,662	43,368	3.5	66,301	3,428	1,655	36.9	1,150	49.3	5,915	19.6	114.7
	Soo Line†	1961	8,536	6,986	15,522	9.7	53,190	2,571	1,201	32.9	943	44.3	3,164	20.7	120.3
		1960	8,515	6,451	14,966	9.3	48,069	2,482	1,131	31.7	958	45.9	2,980	19.5	116.4
	Northern Pacific	1961	19,336	14,414	33,750	3.7	64,931	2,990	1,354	31.3	899	43.6	4,770	21.8	93.9
		1960	19,896	13,176	33,072	3.1	64,863	2,977	1,326	31.1	995	49.7	5,082	21.8	105.7
	Spokane, Portland & Seattle	1961	1,423	3,288	4,711	3.5	45,125	3,027	1,425	32.3	1,092	48.0	6,671	15.0	172.8
		1960	1,592	4,035	5,627	5.2	42,137	2,986	1,428	32.3	1,146	49.1	6,912	14.2	183.9
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1961	57,560	40,994	98,554	4.4	85,317	3,415	1,322	29.6	1,140	63.5	8,242	25.0	122.1
		1960	53,364	37,530	90,894	5.2	79,821	3,144	1,210	28.6	1,286	73.4	8,661	25.5	150.7
	Chic., Burl. & Quincy	1961	26,174	18,722	44,896	4.2	70,649	3,107	1,383	31.9	1,004	49.7	5,199	22.8	217.7
		1960	27,390	20,077	47,467	5.2	66,116	2,991	1,318	30.7	898	45.3	4,946	22.2	171.2
	Chic., Rock I. & Pacific	1961	15,406	23,921	39,327	5.9	69,026	3,304	1,339	31.7	1,038	55.5	4,887	20.9	151.6
		1960	16,308	23,467	39,775	4.1	63,079	2,964	1,182	30.1	1,038	58.2	5,163	21.3	173.9
	Denver & R. G. Western	1961	8,855	6,407	15,262	5.0	76,186	3,591	1,759	35.6	1,017	39.6	7,095	21.2	112.6
		1960	8,799	5,865	14,664	5.9	72,917	3,422	1,669	33.7	1,065	42.6	7,358	21.4	122.7
	Southern Pacific	1961	30,583	42,983	73,566	1.6	79,095	3,355	1,411	30.8	1,373	70.8	12,727	23.8	115.4
		1960	31,699	37,265	68,964	2.2	75,556	3,329	1,371	29.4	1,421	76.5	12,504	22.9	114.5
	Union Pacific	1961	37,928	29,006	66,934	2.8	96,495	3,404	1,463	29.6	1,378	71.6	9,249	28.6	147.4
		1960	33,637	29,712	63,349	2.2	95,338	3,429	1,435	28.6	1,381	75.3	9,063	28.0	148.1
	Western Pacific	1961	2,684	2,643	5,327	4.4	85,756	3,022	1,387	31.9	1,998	92.7	9,046	28.5	163.1
		1960	2,594	2,554	5,148	3.5	76,885	2,687	1,192	29.8	2,090	102.7	8,935	28.8	192.6
Southwestern Region	Kansas City Southern	1961	2,593	5,306	7,899	3.5	96,785	4,958	2,294	35.9	1,082	45.9	9,612	19.6	175.4
		1960	2,380	5,298	7,678	4.7	98,135	4,841	2,267	35.6	1,153	49.8	10,085	20.3	206.8
	Louisiana & Arkansas	1961	1,930	2,599	4,529	9.3	85,503	4,233	2,044	39.0	996	40.4	6,145	20.3	195.9
		1960	1,888	3,335	5,223	5.9	78,163	3,886	1,845	38.4	877	36.7	6,223	20.1	181.4
	Mo.-Kans.-Texas Lines	1961	5,184	7,262	12,446	12.9	61,945	3,677	1,675	35.5	1,015	45.7	4,245	16.9	107.1
		1960	5,046	8,402	13,448	8.4	60,106	3,243	1,426	32.8	952	46.5	3,949	18.6	137.2
	Missouri Pacific	1961	25,586	19,441	45,027	9.2	72,615	3,522	1,620	34.7	1,303	60.7	6,265	20.7	162.0
		1960	24,521	23,996	48,517	6.5	69,817	3,335	1,519	33.0	1,237	58.7	6,187	21.0	181.7
	St. Lou's-San Francisco	1961	8,733	10,493	19,226	1.0	57,306	2,693	1,282	33.2	1,298	58.3	5,489	21.4	198.0
		1960	11,562	11,685	23,247	8.9	56,701	2,745	1,296	32.5	1,123	51.3	5,603	20.8	187.2
	St. Louis Southwestern Lines	1961	1,979	4,483	6,453	2.8	74,125	3,134	1,401	30.2	2,462	120.8	10,244	23.7	236.8
		1960	2,102	4,013	6,115	4.7	75,970	3,111	1,391	29.2	2,431	118.2	9,891	24.5	226.8
	Texas & New Orleans	1961	6,600	12,522	19,122	1.7	84,555	3,466	1,542	33.1	1,475	70.6	7,222	24.5	145.9
		1960	6,733	14,821	21,554	2.1	82,900	3,490	1,595	33.2	1,424	65.0	7,386	23.9	144.2
	Texas & Pacific	1961	3,560	4,930	8,490	5.3	84,630	3,700	1,448	30.8	1,362	74.8	6,396	23.1	225.4
		1960	3,290	5,147	8,437	5.6	80,772	3,468	1,314	28.6	1,394	78.9	6,598	23.4	25.30

*Includes the operations of the Delaware, Lackawanna & Western R. R. and Erie, merged October 17, 1960.
†Soo Line includes operations of Minneapolis, St. Paul & Sault Ste. Marie R. R. merged January 1, 1961.
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.


SINCLAIR
GASCON® GL-XD



A Completely New Oil to Extend Service Life of Today's Higher Horsepower Locomotives

Gascon GL-XD, the newest in Sinclair's famed line of Diesel lubricating oils, has been approved by prominent locomotive engine manufacturers. Millions of miles of service on many of America's largest railroads prove you can get these advantages:

1. Greatly reduced engine wear
2. Improved oxidation resistance
3. Proven noncorrosive to silver and other bearing materials
4. Reduced engine deposits

For additional information, write or telephone Sinclair Refining Company, Railway Sales.
New York · Chicago · Houston

Sinclair
Railroad
Lubricants

Resolution

Adopted by the Members of the Railway Progress Institute*

at their Annual Meeting, November 16, 1961

Whereas, the situation of the nation's railroads is today precarious, with 32 of the 107 Class I railroads failing to meet their fixed charges in the first eight months of this year; and,

Whereas, the major cause of this situation is to be found in gross inequities in the laws and regulations governing transportation in this country; and,

Whereas, the entire railway equipment and supply industry, a multi-billion dollar segment of the nation's economy, with plants in almost every industrial center in the land, is being adversely affected by the resulting inability of the railroads to purchase the things they desperately need and want; and,

Whereas, the President of the United States, on August 2, 1961, asked Secretary of Commerce Luther H. Hodges to draft specific recommendations for "long range and short range actions necessary to achieve and maintain healthy and efficient transportation systems"; and,

Whereas, the Chairman of the Railway Progress Institute, on September 6, 1961, submitted the recommendations of the railway equipment and supply industry to the Secretary of Commerce, generally endorsing the suggestions previously made on behalf of the railroad industry by the President of the Association of American Railroads, but specifically advocating:

1. The authorization of realistic depreciation rates on railway equipment and other facilities; and,

2. Permission for the establishment by railroads of construction reserve funds; and,

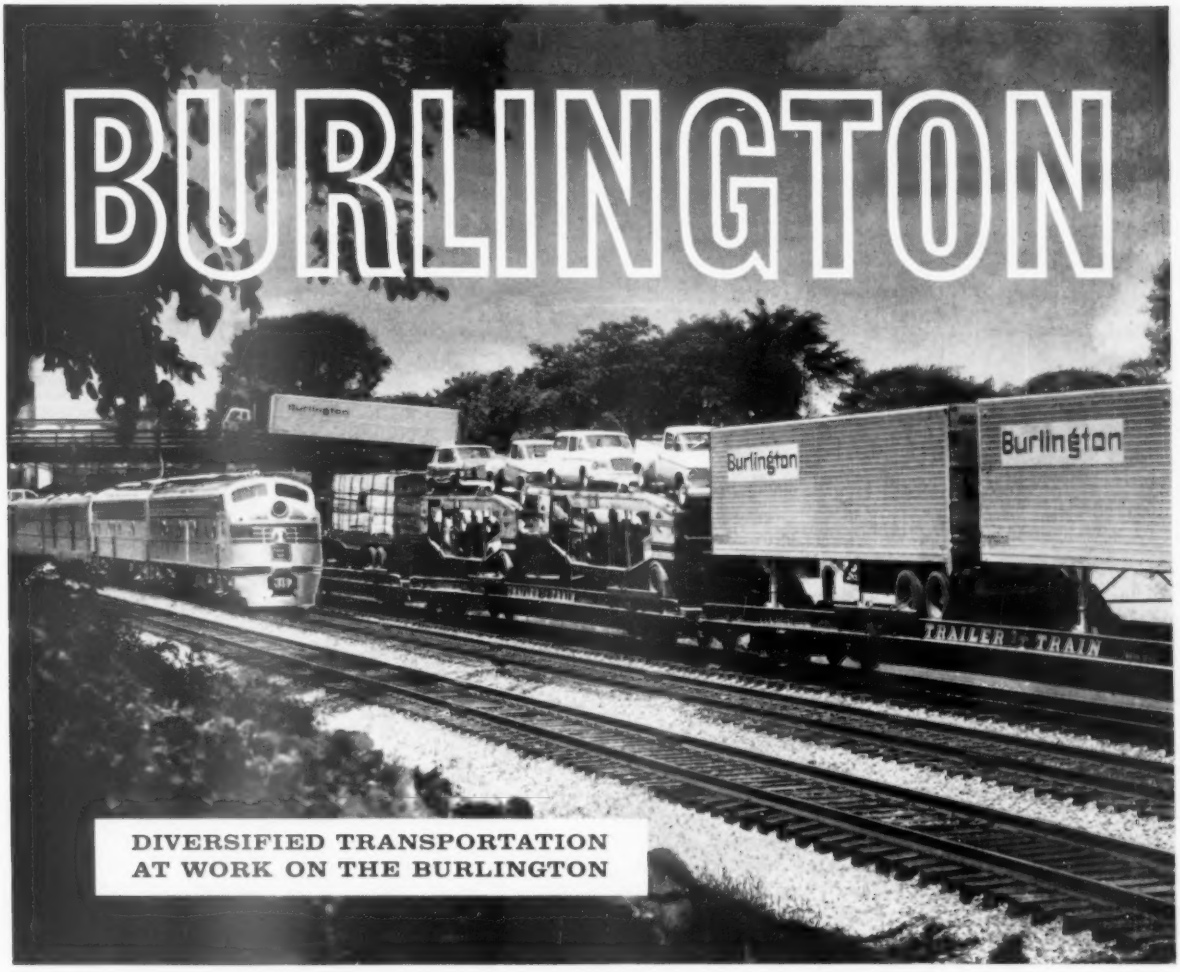
Whereas, it is now clear beyond any question that "actions necessary to achieve and maintain healthy and efficient" *railroads* will materialize only if, and when, all the interests concerned (particularly the railroads, their suppliers and shippers) are united and active in support of remedial measures;

Therefore Be It Resolved, that the Member Representatives of the RPI, assembled in Annual Meeting in Chicago on November 16, 1961 do hereby reaffirm their wholehearted support of the views expressed by the Chairman in the aforementioned letter to the Secretary of Commerce; and,

Be It Further Resolved, that these views be backed up by an RPI program of vigorous action which will give every Member Company and every Member representative an opportunity to demonstrate the sincerity of the views expressed in this Resolution; and,

Finally, Be It Further Resolved, that the Institute's Committee on Transportation Legislation and its Committee on Public Presentations be jointly assigned the task of devising such a program and seeing that it is properly coordinated with such programs as may be developed by the railroads and organizations of the nation's shippers.

**Railway Progress Institute is the national association of the railway equipment and supply industry.*



Diversified industry and diversified agriculture–vital to a prosperous nation–require specialized transportation services. Burlington has $973,503,831 invested to provide such transportation. Freight trains, passenger trains, "piggyback" trailer trains, special-type freight cars, highway trucks–all are ready to serve you.

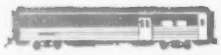
H. C. MURPHY, President

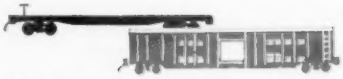
Burlington Route

BURLINGTON LINES

true, we're known as specialists in "specials", but actually we don't specialize in anything but perfection.

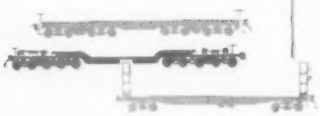
the reason we build more specials than any other carbuilder is merely because we happen to have so precisely what a special requires that whenever railroad men or shippers think of special purpose cars, the next thought is almost automatically . . .





call THRALL

but, this reputation has come to us as singularly excellent engineers and fabricators, not as "special" builders; and we would like to point out that *these are qualities* which can't be "turned off"—whether applied to specials or standards—one car or three hundred.



certainly,

continue to "Call THRALL" for specials—*but why deny your standards this advantage?*

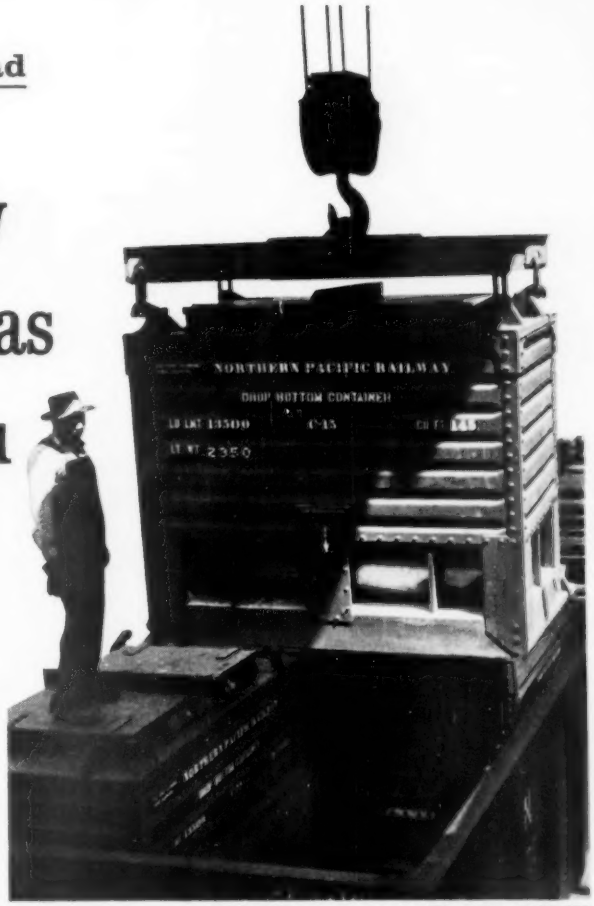
THRALL

CAR MANUFACTURING CO.

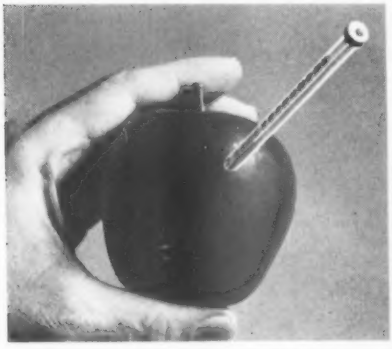
2602 WALLACE STREET, CHICAGO HEIGHTS, ILLINOIS

This is the way to run a railroad

One of these 3 new freight-moving ideas might work for you



Industrial sand rides the rails in specially-designed steel drop bottom containers, slides easily into hoppers at destination. Less sand is spilled and wasted, and unloading time is slashed, compared to old way of shipping in boxcars. Backhauls of fabricated products in the same containers results in an overall annual saving of more than $35,000 for this happy shipper.



Apples move from packer's dock to flatcars to consignee's dock—via NP's fleet of refrigerated trailers. Temperature and humidity are carefully controlled. Supplementing our regular refrigerated car service, this new service is designed for receivers in North Dakota and Minnesota not located on rail sidings.

Boats traveled on flatcars from the midwest to west coast dealers. The boat builders loaded their over-the-road trailers and we piggybacked them west. Shipments arrived in good condition and in ample time for the short selling season—and at considerably less than the over-the-road cost.

What's your freight problem? Call the NP freight representative nearest you so we can get together and move on your problem. It's our job to speed your shipment, protect it enroute, and save you money wherever possible. And we'll do it!

This is the way we run

NORTHERN PACIFIC RAILWAY

Route of the Vista-Dome NORTH COAST LIMITED

NORTHERN PACIFIC RAILWAY

"THE NORTHWEST" magazine, a bi-monthly, reports regularly on business and industry along the NP. For free copy, write to: W. J. Luchsinger, Vice President—Traffic, Northern Pacific Railway, Room 918, St. Paul 1, Minn.

Harmonics to Horsepower . . . everything goes piggyback via General American

America is undergoing a revolution on rails. At freight yards everywhere, truck trailers and containers are loaded onto piggyback freight cars. Once aboard, cargo travels long-distance at far lower cost than it could over the road.

A prime mover in this revolution has been General American with cars like the G-85. This versatile piggyback car accommodates trailers, containers and auto racks. It is lower for better clearance, lighter for bigger payloads. Without leaving his cab, the driver locks his trailer on the G-85 in less than a minute. General American Piggy-Back cars provide new flexibility, greater freedom from damage, new savings to railroads, truckers and shippers.

Piggybacking is just one of many imaginative services and products General American offers industry. Whether your problems relate to shipping or storage . . . to mixing, drying or conveying . . . to nickel coating, plastics molding, water treatment or fastenings, General American's wide experience and directed imagination can help you solve them. Whatever you manufacture or mine, process or ship, let us show you why it pays to plan with General American.

GENERAL AMERICAN TRANSPORTATION CORPORATION

135 SOUTH LA SALLE STREET · CHICAGO 3, ILLINOIS

GENERAL AMERICAN TRADE MARK

OFFICES IN PRINCIPAL CITIES

Roller or Solid?...a bearing specialist's answer

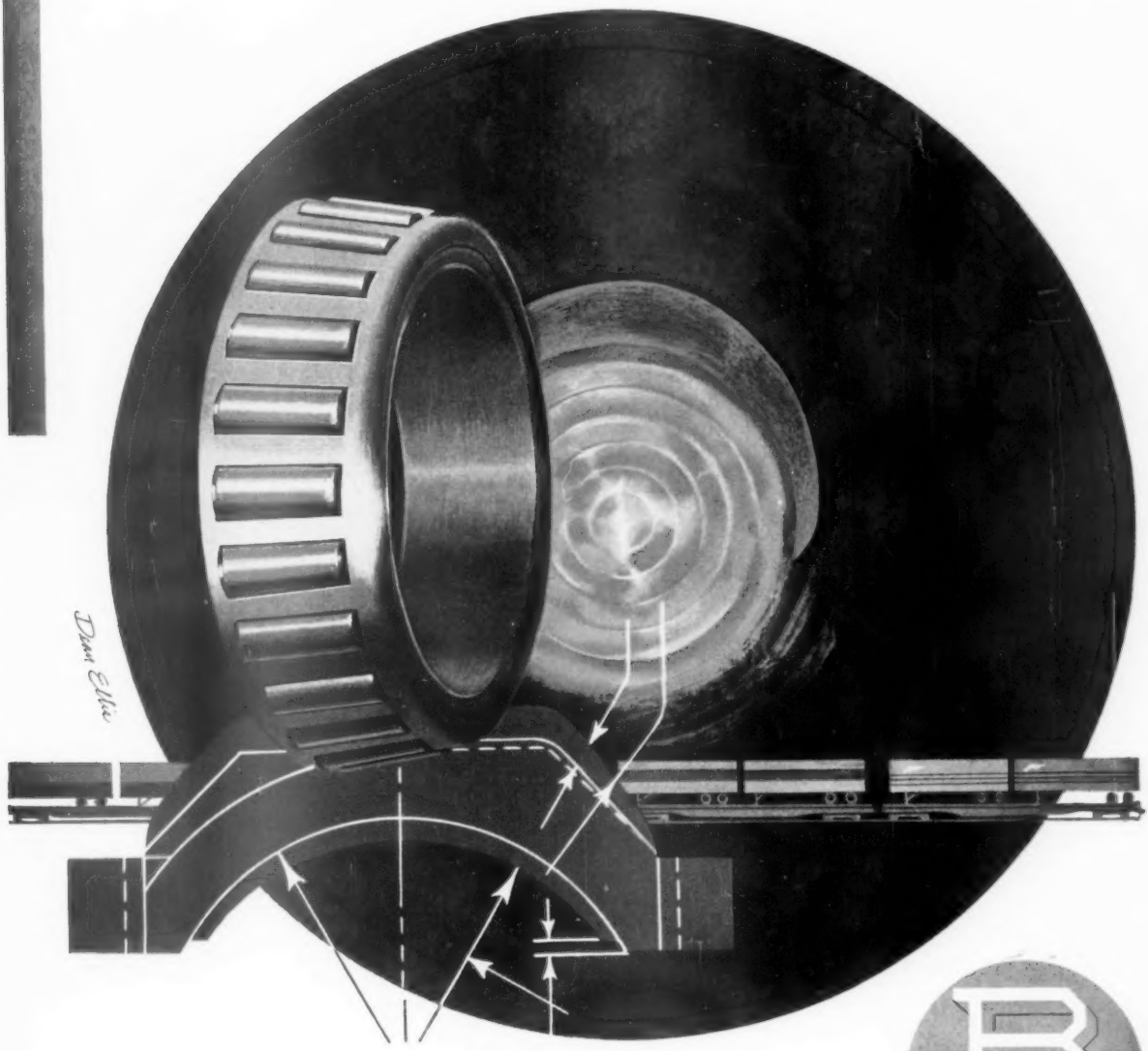
Our belief is that *both* bearings have a job to do.

In general...as much new equipment as possible should have roller bearings – particularly, fast-freight, high-mileage cars. The roller bearing is the only *final* answer to the hot-box.

On the other hand, solid bearings will be needed on existing equipment for many years to come. Low in cost and rugged, they give excellent service.

For these reasons Brenco is the only manufacturer who makes both types and specializes exclusively in railroad bearings.

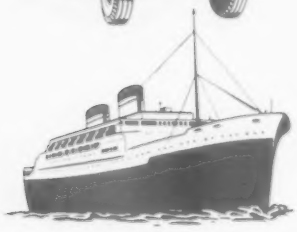
Brenco bearings...more than a million in service!

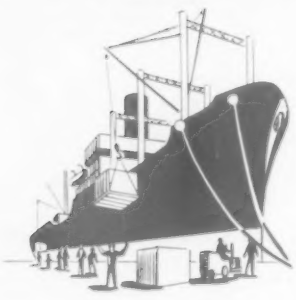


BRENCO INCORPORATED

316 East Main Street, Richmond, Virginia

BRENCO BEARINGS





". . . all public carriers would have equal opportunity to exploit their advantages"

A statement by The Baltimore & Ohio Railroad, expressing its views on how the nation's transportation system can be improved.

POLICY—The government should be organized so that over-all planning for transportation is not only possible but required. As it is now, billions are spent without impartial analysis in depth of the true economic worth of the projects or the effect on established agencies.

REGULATION—The present unevenness in regulation should be corrected in large measure by requiring every public carrier, irrespective of form, to publish its rates and to revise them, if on complaint of a competitor, they are found to be noncompensatory. If this is not feasible, then minimum rate control, where presently applicable, should be withdrawn—with the result that *all public carriers would have equal opportunity to exploit their advantages.* Competition on either basis should in time correct the present over-capacity in public transportation and allow it to deal with private transportation on realistic terms.

PRIVATE CARRIAGE—Private carriage is not bona fide when, in either direction, it engages in public transportation. Only truly private carriage should be allowed.

USER CHARGES—The use of public facilities and services for commercial purposes should be adequately compensated. This compensation should include tax equivalents as long as railroad and pipe line rights of way are taxed. Subsidies for railroads should not be granted until the effect of eliminating subsidies to other forms is known. The right of a suburban community to contract for commutation service on a cost plus basis and redistribute such cost among residents on any formula selected as fair, including local taxation, should not be regarded as subsidy.

BALTIMORE & OHIO RAILROAD

NATIONAL CUSHIONING SYSTEM FOR AUTOMOBILE RACKS

*Acceleration of Auto Rack 60% lower than Flatcar at 8.5 mph impacts.**

As a Leader in design of shock absorption devices, National has developed a special cushioning system, using proven components, that provides four important advantages for automobile transportation:

1. Auto rack acceleration 60% lower than freight car body acceleration at 8.5 mph impacts*
2. Positive *re-centering* of rack on car
3. Economy of spring-rubber combination over all-rubber devices
4. Impact tested under actual operating conditions

National Cushioning System-equipped automobile racks are now in service.
Automobile racks present unique problems in cushioning that cannot be solved with conventional shock-absorbing devices. We suggest that you consult National now for full details.

*Auto manufacturer's test data shows that auto rack acceleration was 60 to 65% lower than car body acceleration at 8.5 mph impacts.
National cushioning units for automobile racks consist of four separate tubular housings, one at each corner of the car, with plungers contacting vertical beams of the rack. Two housings at one end contain rubber pads similar to those used in National rubber draft gears; two housings at opposite end each contain four inner and outer steel coil springs of the same type now used in the improved National M-17-A draft gear. A-4031A

Transportation Products Division

International Division
Cleveland 6, Ohio

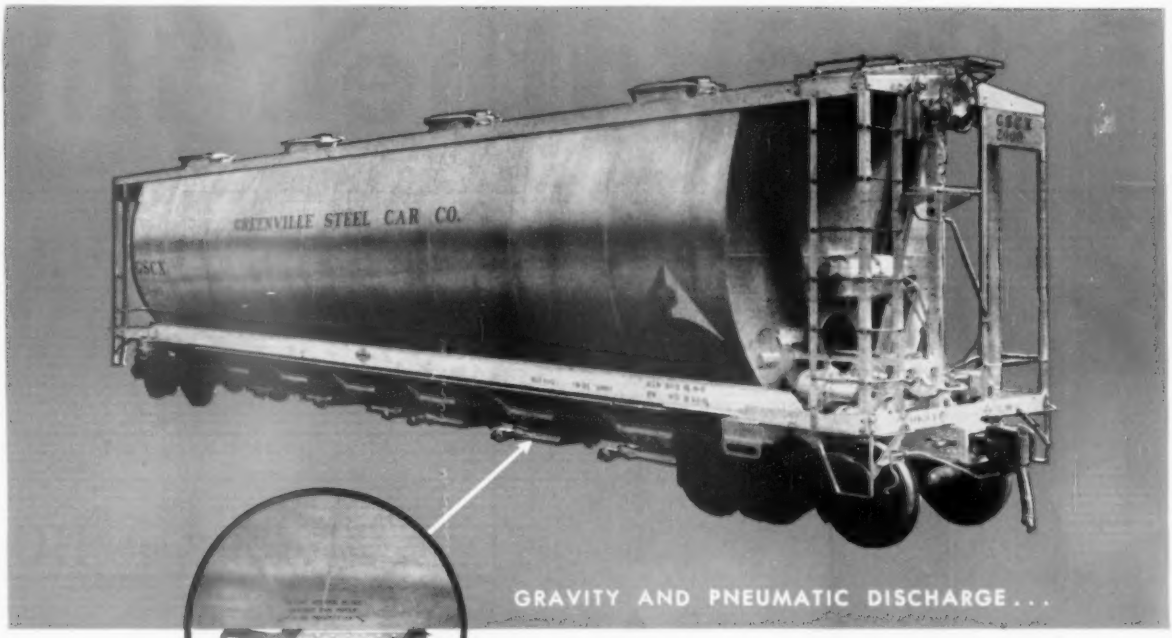
National Castings Company of Canada, Ltd.
66 Portland St., Toronto 2B, Ontario

NATIONAL CASTINGS COMPANY
Cleveland 6, Ohio

COUPLERS • YOKES • DRAFT GEARS • FREIGHT TRUCKS • JOURNAL BOXES • ROLLER BEARING ADAPTERS • NATIONAL SPEEDLOADER CONTAINER HANDLING SYSTEM

***REA EXPRESS** is on the move for national defense. America's defense power can never be stronger than its ability to transport material through the air, on the land and over the world's seas. **REA EXPRESS** is continually aware of its responsibility to help expand the sinews which link America into one vast defense network in order to maintain America's freedom.*

REA Express is the new name for the complete domestic and international surface and air services of Railway Express Agency.



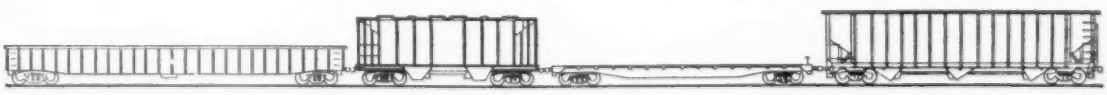
CAR LOADS FASTER through four hatches entering each compartment. Pneumatic and gravity discharge systems operate from either side of the track.

28,000 POUNDS MORE PAYLOAD
in this aluminum, tank hopper car

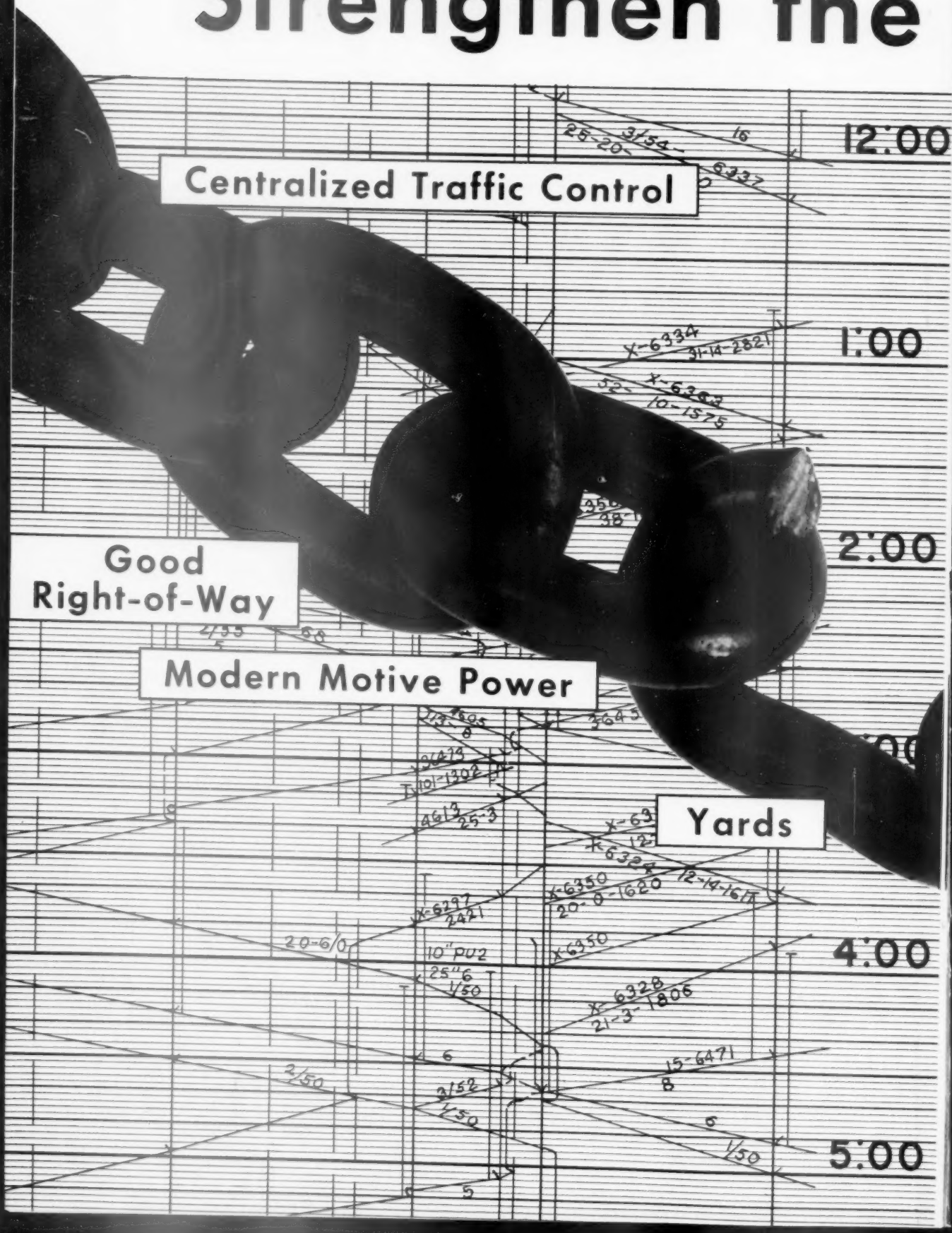
How much more revenue can you realize with this lightweight, rugged new car from Greenville? Weight savings give you an extra 28,000 pounds of cargo in traditional covered hopper space... 13,000 pounds more than other aluminum cars. Even better... costly painting, lining and relining jobs are eliminated. Foodstuffs... grain... malt... all travel in dry, sanitary compartments and unload clean and fast in a third of the time required with conventional covered hopper cars. Want the facts? Drop a note to Greenville today. See for yourself how this car can dramatically increase your payloads on almost all dry, bulk commodities.

GREENVILLE STEEL CAR CO.

GREENVILLE, PENNA. *Subsidiary of Pittsburgh Forgings Company*



Strengthen the

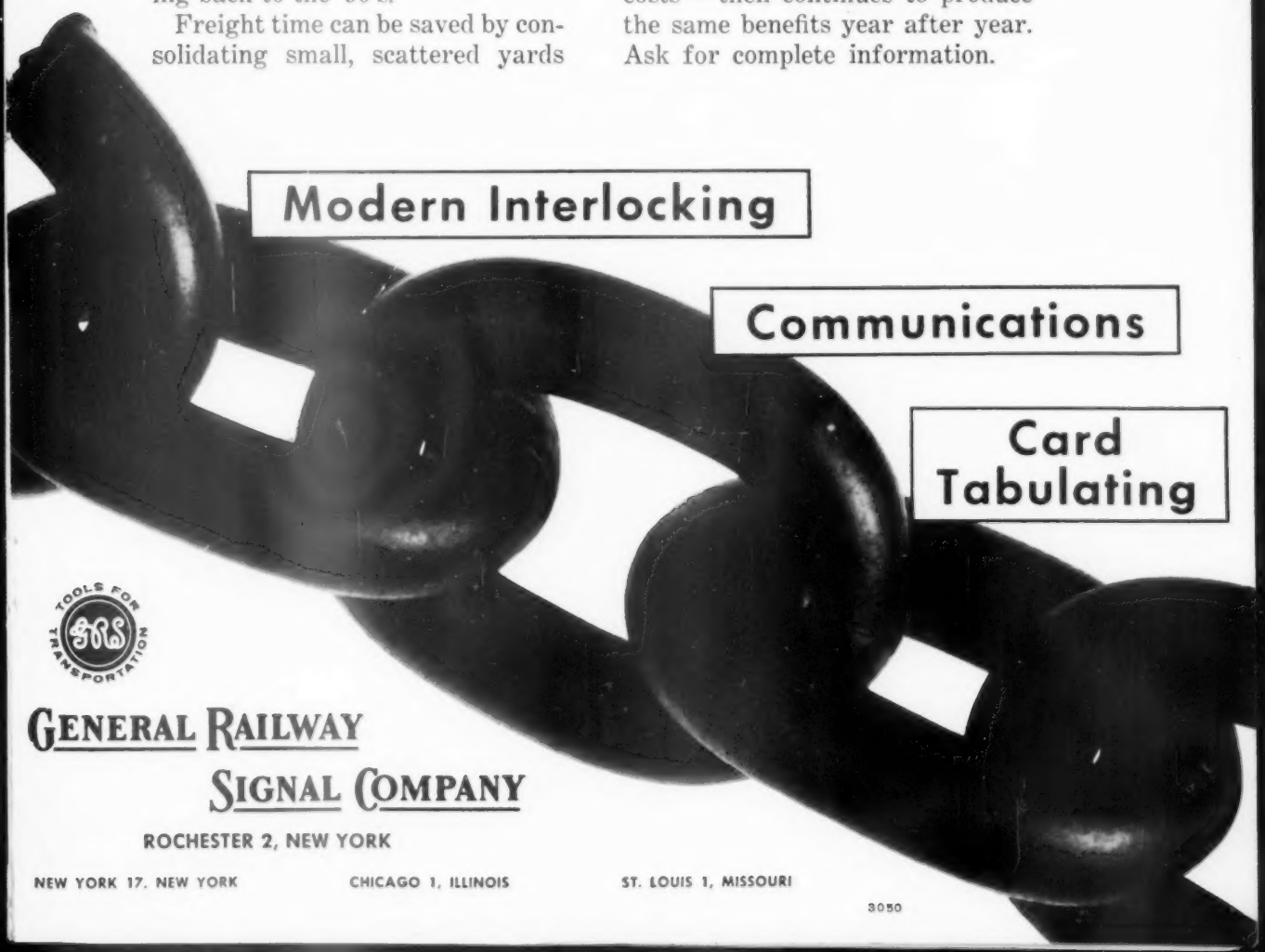


WEAK LINK in freight service

The great need today is to develop and retain freight traffic by **improved service to shippers** — by decreasing transit time, loss and damage.

Your chain of efficient operation may include the most up-to-date signaling, full dieselization, etc. and yet be greatly hampered by obsolete yard practices—perhaps dating back to the '90's.

Freight time can be saved by consolidating small, scattered yards into one or two large yards—made superefficient by GRS Class-Matic yard automation. Cars will be classified and on their way hours sooner, at less cost per car, and with fewer men. Your customers get better service. You improve your competitive position. Moreover, a GRS automatic yard pays for itself in a few years through lower operating costs — then continues to produce the same benefits year after year. Ask for complete information.



TOOLS FOR TRANSPORTATION

GENERAL RAILWAY SIGNAL COMPANY

ROCHESTER 2, NEW YORK

NEW YORK 17, NEW YORK CHICAGO 1, ILLINOIS ST. LOUIS 1, MISSOURI

3050

SOUTHLAND
LUBRICATORS KEEP THE SIGNAL GREEN.*

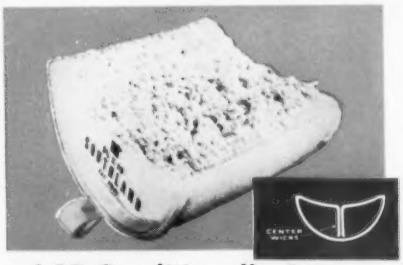
Southland Lubricator Pads are contoured to fit naturally and easily into the journal box and against the journal to assure safe, ample and economical lubrication under varying temperatures.

The highly oil resistant foam cores absorb and retain oil, creating a constant supply of oil to the myriad of looped lubricating wicks and onto the journal surface.

Southland Lubricators are extra heavily designed and constructed for long life and trouble-free service. Materials are super strong and quality craftsmanship builds positive economies into every Southland unit.

Easily installed; so efficient in service, Southland Lubricators are the natural and correct way to lubricate journals positively and economically.

We'll gladly send you detailed data on Southland Lubricators and explain the difference, **naturally.**



AAR Conditionally Approved

SOUTHLAND MFG. CO., INC.
700 Front Street, Norfolk 10, Virginia

In Canada
Dominion Railway Car Supply Co. Ltd. Montreal, Quebec

Gown by Ceil Chapman

Paris comes to 7th Avenue via General American

Mass produced in New York's Seventh Avenue garment district, clothes made from today's wonderful fabrics let a working girl dress like a debutante on a stenographer's salary. Fabrics are shrink-proof, wrinkle-free, permanently pleated and quick-to-dry . . . in a rainbow of colors and shades and in a variety of finishes and textures.

General American works with textile producers, fabricators and mills in many ways. Liquid chemicals are stored in General American Terminals, are hauled in GATX tank cars, while dry chemicals are transported in other special General American freight-cars. Producers and fabricators rely on General American dryers and mixers. In the mills themselves, parts subject to wear are nickel alloy coated with another product of General American research . . . Kanigen®.

Modern marketing methods call for careful planning and speedy execution, not only in the changeable fashion field, but in all industry. To meet these demands, General American's imaginative research is translated into fast production and deliveries are made "on schedule". Whatever you manufacture, mine, transport or ship, call on us. It pays to plan with General American.

GENERAL AMERICAN TRANSPORTATION CORPORATION

135 SOUTH LASALLE STREET • CHICAGO 3, ILLINOIS

GENERAL AMERICAN
TRADE MARK

OFFICES IN PRINCIPAL CITIES

RAILROADS CALL JACK NILEST THEIR BEST FRIEND

In thirty years of serving railroads, Jack Nilest has made lots of friends. How? By having a sure knowledge of the railroad business and by having the petroleum products his railroad customers need *plus* the resources to get these products delivered where needed *on time*.

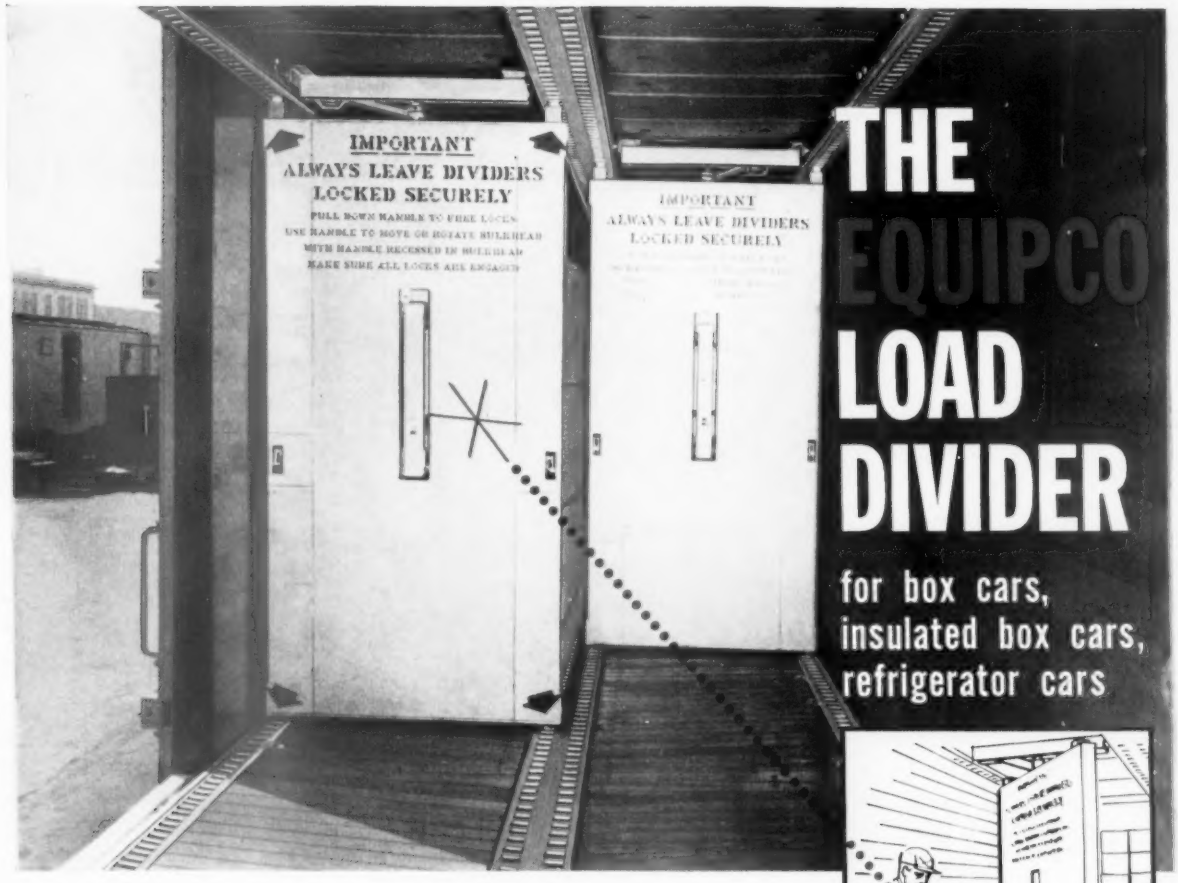
Jack can draw on six refineries plus extensive pipeline, barge and bulk terminal facilities to serve his railroad customers. He draws help from research men at American Oil's Whiting laboratories who are working continuously to improve the quality of railroad fuels and lubricants.

From American Oil's sales research department, Jack gets data on carloadings, steel and automotive production, grain shipment forecasts and a host of other pieces of information. These, together with his own extensive knowledge of the railroad business, help him develop plans and immediate and long-range supply programs that mean the best possible service to the railroads.

Would you like to have Jack Nilest on your team? Call him. Or write Railway Sales Department, **American Oil Company, 910 South Michigan Avenue, Chicago 80, Illinois.**

AMERICAN

Good friend of railroaders is Jack Nilest, sales manager of American Oil's railway sales department. Jack has more than thirty year's experience serving railroad customers.



THE EQUIPCO LOAD DIVIDER

for box cars, insulated box cars, refrigerator cars

Gives you 4-point locking... with a single operating bar!

- **Reduces loss and damage claims**
- **Cuts loading time . . . reduces dunnage**
- **Can be load-sealed for LCL shipment**
- **No loss of refrigeration efficiency**

Easy-to-use Equipco Load Dividers roll into place with minimum effort. Fit snugly against lading and are locked into position at 4 points—2 top and 2 bottom—with a *single operating bar*. Permits car to be segmented for profitable and safer transit of lading. Dividers are permanently secured—no loose parts. Thoroughly use-tested to meet both railroad and shipper's requirements.

Can be positioned to meet practically any lading needs.

No interference even when loading both ends of car at same time.

Any one or all dividers store out of way next to side or end walls.

"Makers of EQUIPCO Hand Brakes . . . Vertical, Drop Shaft and Lever Types"

Equipco UNARCO

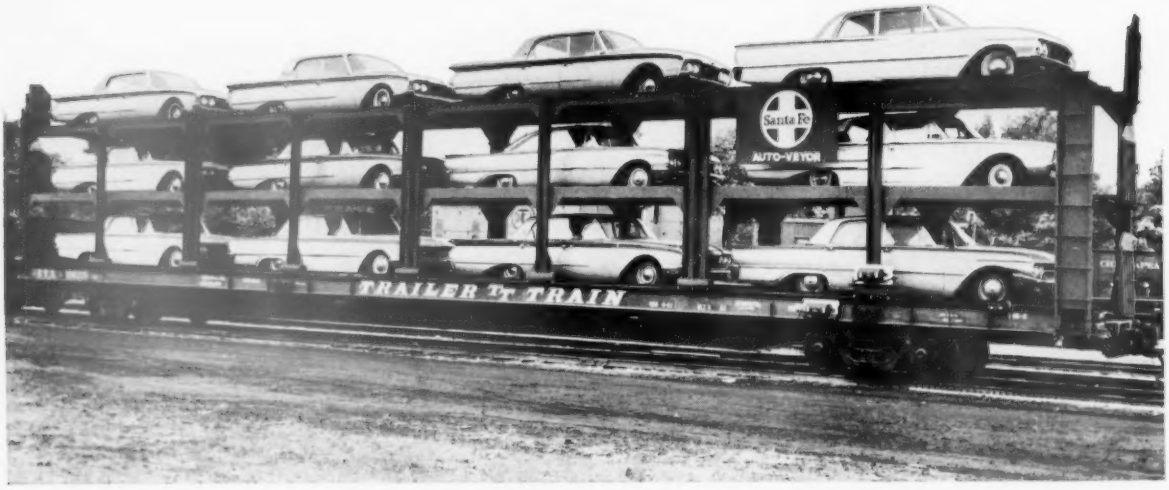
EQUIPMENT SPECIALTIES DIVISION

Union Asbestos & Rubber Co. Dept. RA1261

6 N. Michigan, Chicago 2, Illinois

SEND TODAY **for full fully-illustrated brochure of the EQUIPCO Load Divider. No cost or obligation.**

The Dana Model 2 Rack Provides Maximum Cushioning

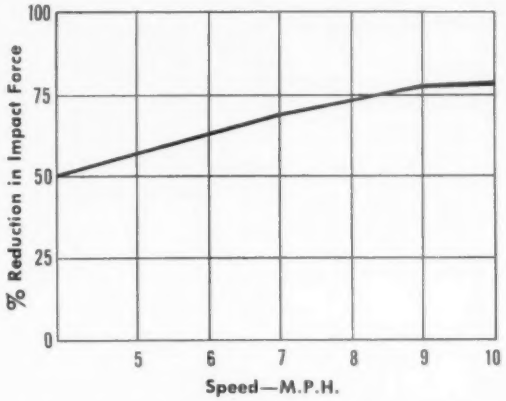


This Santa Fe AUTO-VEYOR is typical of the Dana auto racks now in service on leading railroads. Here shown applied to a Trailer Train flat, the Dana rack meets railroad demands for shock resistance, ruggedness, capacity and convenience of load-unload.

Dana Auto Rack Design Solves Problems of Auto Transport by Rail!

Dana specialized auto racks are adaptable for application to all standard makes of 85, 87 and 89 foot flatcars. They are four section, Tri-Level convertible to Bi-Level. Dana racks accept 6,000# axle loads on all decks and accommodate 12,000# vehicles on any deck in any quarter section. One piece deck construction eliminates drip pan, and deck centers will support tricycle type tractors.

With all sections mounted on rubber shear pads to eliminate friction, the Dana rack creates a new concept of lading cushioning. It achieves maximum cushioning within the limitations of 8 inches of travel, and provides vertical as well as impact cushioning.



Dana also has developed a cushioned platform cargo carrier for container, piggyback and saddleback operations. For complete information write Dana Corporation, Toledo 1, Ohio.

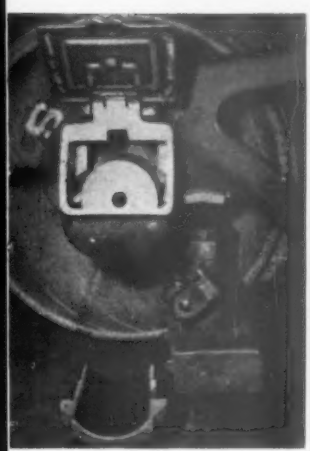
DANA Spicer

DANA CORPORATION
Toledo 1, Ohio

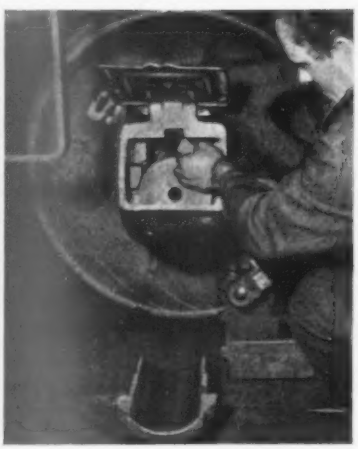
SERVING TRANSPORTATION—Transmissions Auxiliaries • Universal Joints • Clutches • Propeller Shafts • Power Take-Offs • Torque Converters • Powr-Lok Differentials • Gear Boxes • Forgings • Axles Stampings • Frames • Railway Drives • Retarders

IT'S SIMPLE...

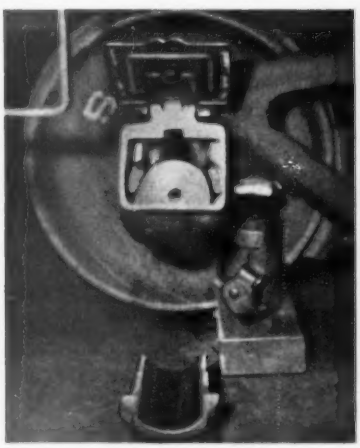
TO INSTALL "GEORGE" JOURNAL STOPS



1. Remove brass and wedge.



2. Place face of stop on top of journal and lower into position.



3. Installation completed.

for standard AAR rib-type journal box

The New GEORGE Journal Stop

- Is engineered for simplicity.
- Is priced for economy.
- Is made of long-lasting non-metallic material.
- Withstands maximum impacts.
- Gives positive journal control.
- Installation costs—nil.
- Is AAR Test Approved for use in interchange.

"LET GEORGE DO IT!"

for standard AAR non-rib type journal box

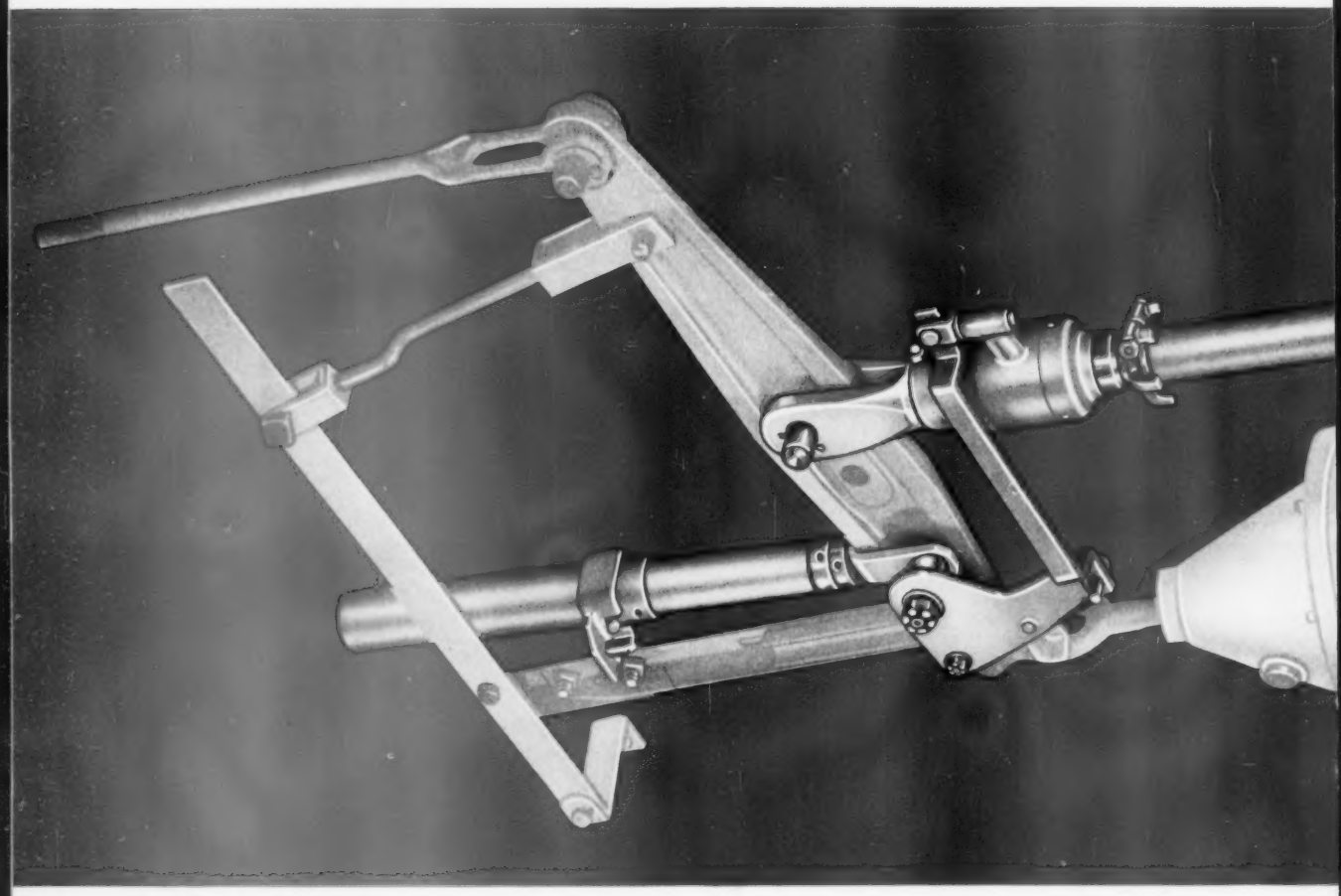
JOURNAL BOX SERVICING CORPORATION

sales offices

332 S. MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

"Over 33 Years in Car Lubrication"

AJAX "FFA" double-acting AUTOM



For dependable slack control...

The *completely automatic* AJAX-FFA (double-acting) Brake Regulator is designed to provide longer, better, trouble-free service. It takes up slack, lets out slack *instantaneously;* keeps just the proper brake shoe clearance *at all times.* Manual adjustments of Regulator and brake rigging are never needed...not even when brake shoes are changed.

Here are some superior AJAX-FFA features:

1. *Instantaneous* let-out to predetermined piston travel on *first* brake application. Takes up slack *as it occurs*, not in increments. Piston travel is *always* at predetermined setting.

2. No chance of short travel and resultant excessive stresses on car and brake rigging. Slack is adjusted either way *on application* of the air brake; no "pre-charging" necessary.

3. Adjusts slack while there is *no load* on the Regulator. Less wear, longer life!

4. Positive, long-wearing locking device secures

ATIC BRAKE REGULATOR

for long and durable service!

the AJAX-FFA Regulator after each correction of piston travel.

5. Impervious to shock; not affected by car dumping operations.

Ruggedly designed and built with materials, parts and capacities to exceed A.A.R. requirements, the AJAX-FFA Brake Regulator is a positive-acting, sturdy device which will make many important savings for you. Working parts are safely enclosed, under constant lubrication, to operate without attention for the full scheduled air brake overhaul period.

Write us today for further and complete information.

The AJAX "FFA" Automatic Brake Regulator is manufactured in the United States by...

PENTRON

AJAX CONSOLIDATED COMPANY

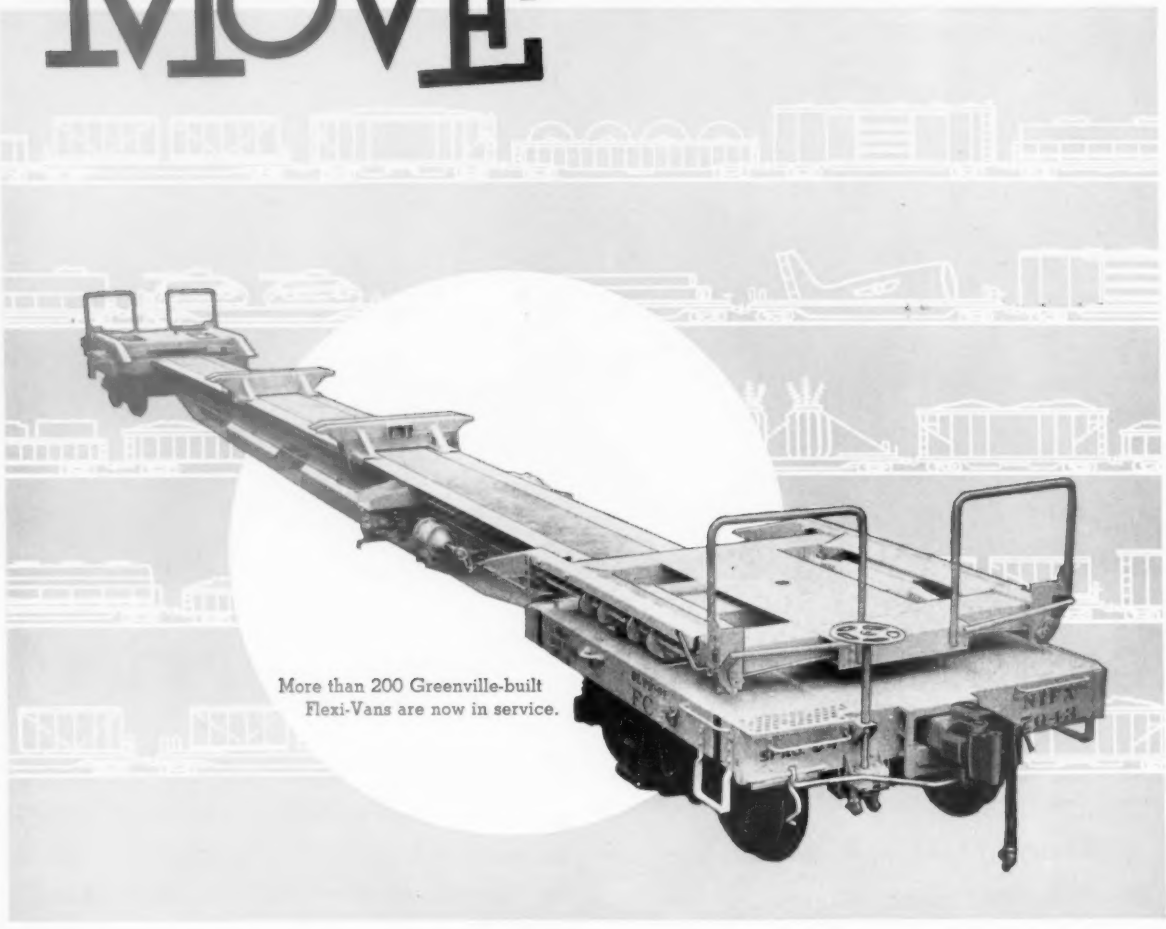
Division of Southern Electric Co.

8701 S. Greenwood Avenue, Chicago 19, Illinois

if it has to MOVE

No matter what the cargo, there's a Greenville car for the job. This Mark III piggyback unit gives you complete flexibility . . . loads and unloads in minimum time and in the future, helicopters may transfer trailers to ships in port or offshore. Versatility, speed and practicability are the keynotes.

Cargoes travel surer and safer on the rails and travel best in Greenville cars. Whether you're talking piggyback, hoppers, covered hoppers, aluminum tank-type hoppers, flats or gons, Greenville has the cars and skills for the job. Include Greenville in your next "invitations to bid". You'll be working with America's most experienced car builders.



More than 200 Greenville-built Flexi-Vans are now in service.

GREENVILLE

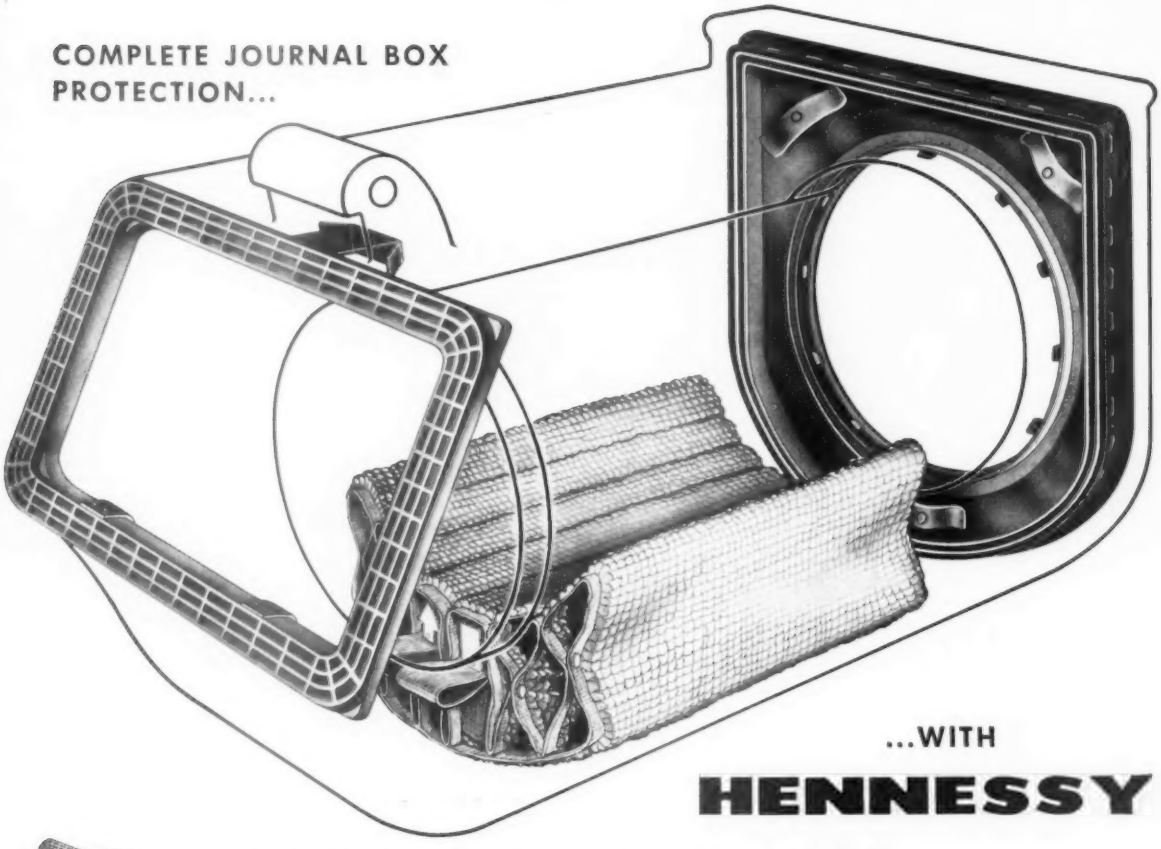
STEEL CAR COMPANY

SUBSIDIARY OF PITTSBURGH FORGINGS COMPANY

GREENVILLE, PENNSYLVANIA

THE GREENVILLE STEEL CAR

COMPLETE JOURNAL BOX PROTECTION...

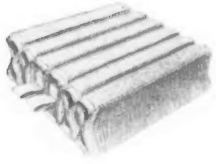


...WITH

HENNESSY

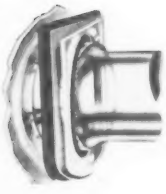
HENNESSY AR14 LID SEAL . . . INSTALLS IN SECONDS

No bonding, no bolting, no welding is required to install. The AR14 clips to the journal box and wedge retaining lug in seconds . . . not to the lid. Contoured construction provides a positive fit with no lid gapping. Cushioning action of specially molded material assures long seal wear and extends lid life. Positive seal keeps dirt and moisture out . . . oil in . . . effectively protects the journal from the lid side.



HENNESSY LUBE-PAD 13 . . . EXCEPTIONALLY LONG LIFE

Designed to follow the contour of the box, Lube-Pad 13's soft pliable construction affords maximum contact with minimum pressure against the journal. Multiple fold design provides voluminous oil to the journal at all times under all conditions. Cotton jacket and foam core retains several times its own weight of oil in addition to free oil in box. Short pile cabled yarn specially twisted, resists adherence to journal even in cold weather, eliminates pad shifting in box. AAR Conditionally Approved.



HENNESSY AR12 DUST GUARD OIL SEAL . . . COMPLETELY SELF-ALIGNING

Operates efficiently without need for flat back bearing or axle stops.

The AR12 Dust Guard Oil Seal installs quickly in dust guard cavity to provide a highly effective wheel side oil and dust seal. The steel wheel side face plate and neoprene rubber side seal prevent oil from escaping out of the box through the dust guard cavity. The nylon floating center ring prevents oil loss along the axle. The teeth continually wipe the journal oil off the dry seat. The steel spring plate and steel tension springs constantly adjust the center ring maintaining an effective seal at all times under all conditions. The nylon center ring has complete freedom of movement in all planes. This ability to "roll with the punch" prevents damage to the ring during braking, switching impacts or skewing of the truck on curves. AAR Test Approved.

WRITE FOR MORE INFORMATION TODAY.

HENNESSY LUBRICATOR

HENNESSY LUBRICATOR CO., INC.

CHAMBERSBURG • PENNSYLVANIA

MAKERS OF LUBRICATORS FOR ALL JOURNALS OF RAILWAY EQUIPMENT

Outstanding In Performance

A New And Better Lubricant For Your Diesel Locomotives–

Service tested 1½ years, Mobilgard® 412 offers extended oil and engine life

After one and a half years of testing on selected railroads, Mobilgard 412 oil is now available for general use . . . promises definite economies in extended oil life and reduced wear of engine parts.

EXTRA STABILITY

Mobilgard 412 shows high oxidation resistance. Field performance has demonstrated its excellent stability under the high temperature conditions of today's high-output diesel engines.

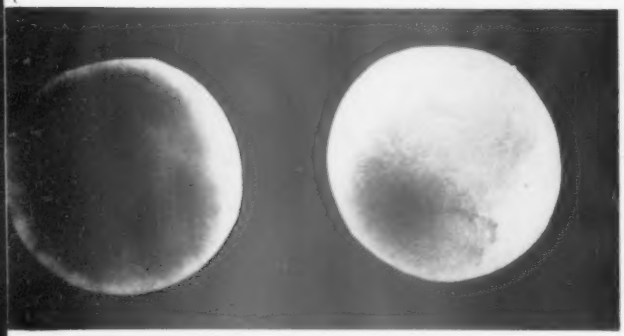
Throughout tests on selected roads Mobilgard 412 exhibited high resistance to thickening, sludging and formation of engine deposits. With this new oil, viscosity increases at a lower rate in service—remains below condemning limits for longer periods. This resistance to thermal breakdown is economically important in lower oil cost due to less frequent oil changes.

FILTERABILITY

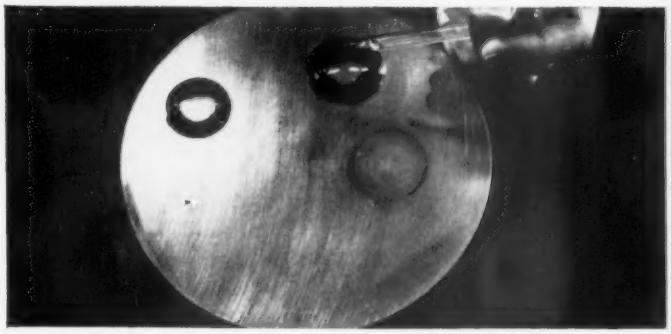
Mobilgard 412 also provides a highly desirable combination of filterability and long-lived additive activity. The oil holds combustion soot and other contaminants in sufficiently large agglomerates to assure high filtration efficiency . . . yet filterability is not achieved at the expense of additive activity. In research laboratory tests, as shown on the opposite page, Mobilgard 412 has a higher level of additive activity after 80 hours of service under accelerated contaminating conditions than most oils have when they are brand new.

SUPERIOR ACID NEUTRALIZING ABILITY

Mobilgard 412 has a high initial alkalinity which is retained in service to a significant degree. By promptly neutralizing the acidic by-products of fuel combustion, Mobilgard 412 reduces wear, corrosion of metal parts and the formation of engine deposits . . . retains this neutralizing ability long after other oils have lost their alkalinity. This characteristic of Mobilgard 412 becomes even more important where low-grade fuels are being used in locomotives.



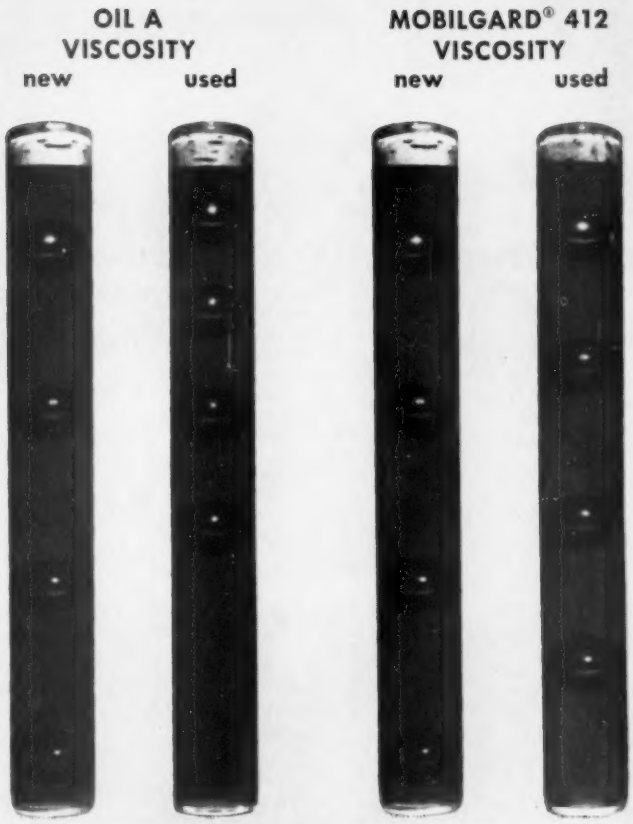
Mobilgard 412 shows improved filterability. Two oil samples on tissue over a light source show the comparative soot levels of Oil A (a well-known diesel lube oil) and Mobilgard 412 after an accelerated engine test. Presence of insolubles (soot) impedes light transmission. Mobilgard 412's appreciably lower level of insolubles (right) is due entirely to its superior filterability.



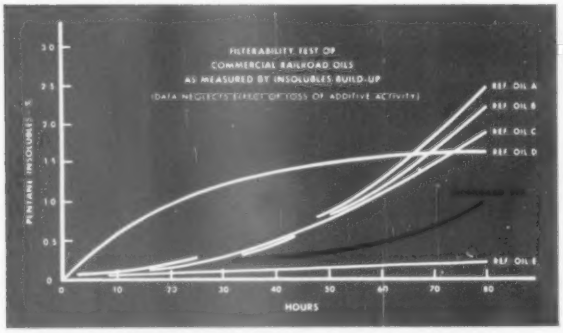
Mobilgard 412 shows greater acid neutralizing ability. Top shows application of dilute sulfuric acid and oil to small glass dishes which prevent uncontrolled spreading on cast-iron plate. At bottom, although the acid added to Oil A (right) caused considerable corrosion, the same amount of acid added to Mobilgard 412 (left) caused only slight corrosion.

TEST PROVES MOBILGARD 412's VISCOSITY STABILITY

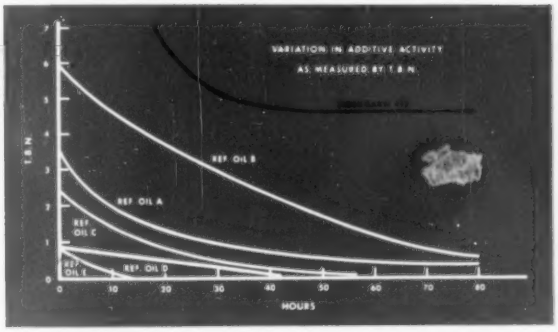
Multiple exposure of falling-ball viscosity device dramatizes Mobilgard 412's resistance to viscosity increase in accelerated oxidation test against a widely used diesel lube oil (Oil A). Left-hand test tubes show that Oil A increases in viscosity considerably under test conditions. Test tubes at right show that Mobilgard 412's viscosity increase under same conditions is less than half that of Oil A.



Mobilgard® 412 proves best for filterability plus additive activity



Results of 80-hour engine test prove Mobilgard 412 combines high filterability with extraordinary retention of additive activity. Curves at left show filterability as measured by build-up of pentane insolubles. For filterability alone, Oil E looks best, but chart on right shows



why—almost complete loss of additive activity. On an over-all basis, this test of Mobilgard 412 vs. 5 other widely used railroad diesel lube oils proves Mobilgard 412 to be by far the best engineering compromise between these two highly desirable qualities.

Call or write for detailed report:

Mobilgard 412 is highly effective in meeting the needs of today's higher horsepower diesels as well as the needs of older units. It will pay you to read the detailed engineering report on Mobilgard 412. Ask your Mobil Representative for a copy or write us at the address below:

Mobil

MOBIL OIL COMPANY, 59 East Van Buren Street, Chicago 5, Illinois
150 East 42nd Street, New York 17, New York

combined

the skills and facilities of PULLMAN-STANDARD and MATISA

survival This ad tells of the combined efforts of two railroad suppliers to save time and money for the railroads.

Railroad suppliers have spent many millions of dollars developing new equipment, the full benefits of which are denied the railroads due to inadequate depreciation allowances.

By *combining* our sales, engineering and service forces, we save money for the railroads so they might take advantage of the newest money-saving equipment at the very lowest cost.

A more *comprehensive line* of track equipment; more *effective sales* information; faster, more *efficient service.*

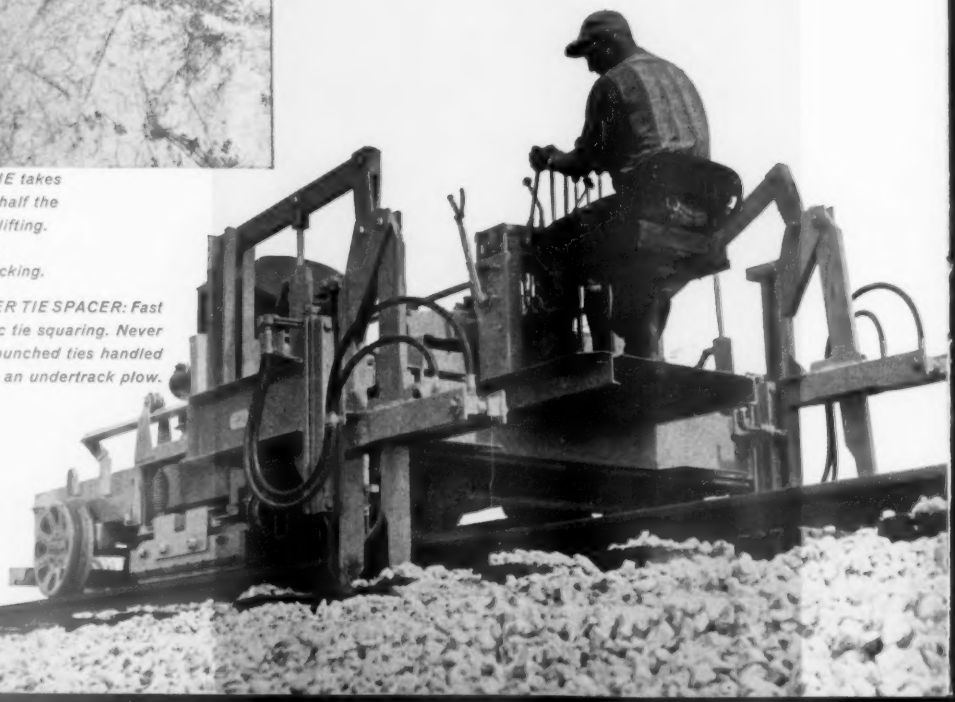
Look, for example, at the two machines teamed up on this page, the P-S tie spacer and the Matisa tie renewal machine.

Rely on the Matisa/Pullman-Standard team for *comprehensive sales, conscientious service.*

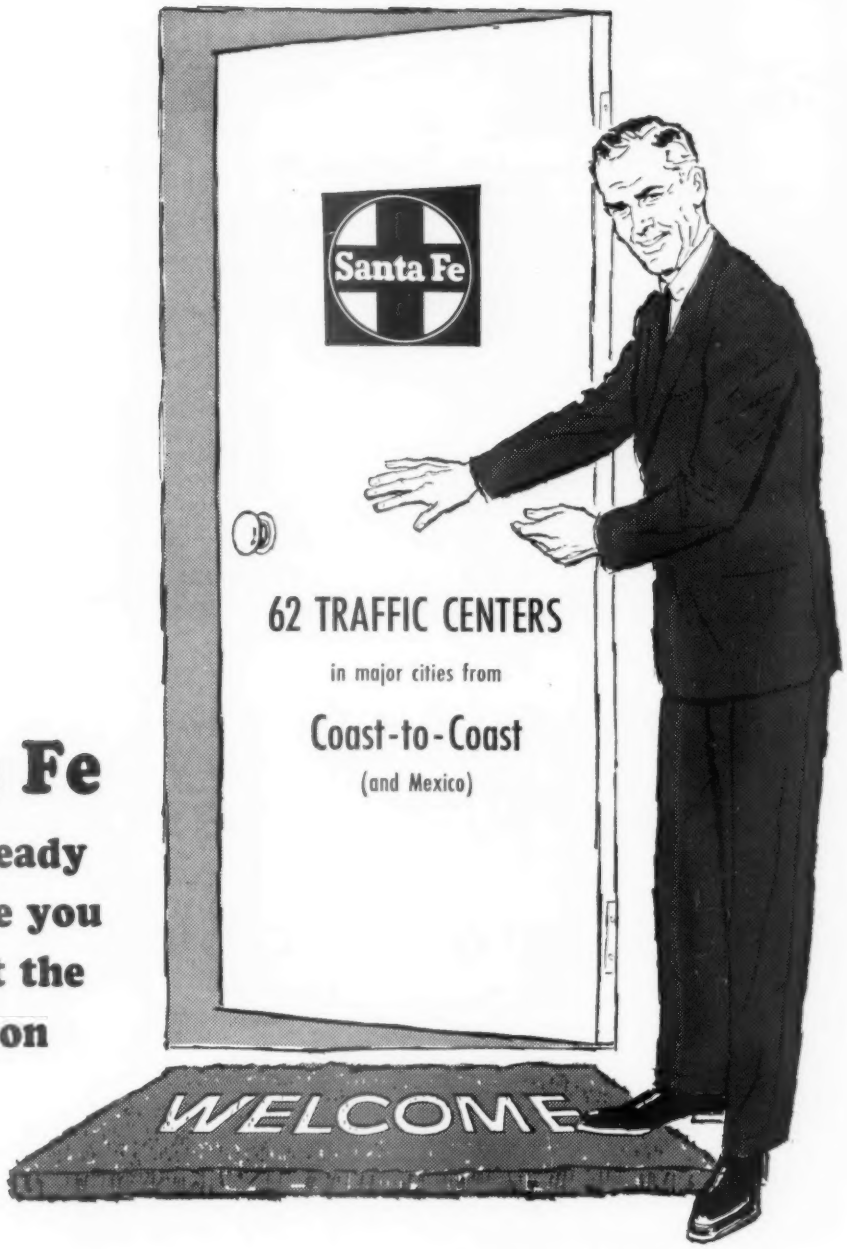
MATISA EQUIPMENT CORPORATION
1020 Washington Avenue
Chicago Heights, Illinois

PRI MEMBER

The famous MATISA TIE-RENEWAL MACHINE takes old ties out, puts new ties in, in half the time, half the cost! Note rail clamps and hydraulic rams for lifting. Heavy knurled rollers eject or insert ties. New hydraulic boom facilitates tie-handling and stacking.



The PULLMAN-STANDARD POWER TIE SPACER: Fast spotting, positive holding, automatic tie squaring. Never disturbs track surface. Skewed or bunched ties handled at top speed, even following an undertrack plow.



Santa Fe

stands ready to serve you throughout the nation

We want our customers to have quick information about Santa Fe freight and passenger services. Also facts about industrial sites. That is why we maintain 62 traffic centers throughout the nation.

Your inquiries get prompt answers because each office is in constant touch with headquarter centers of Santa Fe operations.

Drop in, or give us a call whenever you want information about Santa Fe services. If there is no Santa Fe traffic center in your city, write for information about our traffic representative who serves your city.

SANTA FE SYSTEM LINES

80 East Jackson Blvd. Chicago 4, Illinois

ANGLE LOADING and unloading in any order is possible with TransTainer.

OPERATION SPEED-UP—13

Ramps Plus Cranes Make Yard Flexible

CIRCUS UNLOADING will continue on eight previously existing tracks with ramps.

What PRR describes as the "world's busiest" piggyback terminal is expected to become even busier in the future. To keep traffic moving smoothly, Pennsylvania has just completed a major expansion of its Kearny, N. J. TrucTrain terminal (RA, Nov. 27, p. 72).

In terms of trailers loaded, TrucTrain volume is now "running at twice the 1960 rate," PRR reports. Monthly movements are now approaching the 17,000 mark, PRR says, and "all signs point to still higher levels of TrucTrain business in the future."

For the month of October, Kearny Terminal alone handled well over half of PRR's total piggyback volume. The Kearny total, 9,361 trailers, represented a 25% growth over October 1960, and a much larger growth from the 2,700 trailers per month in 1956.

Opened in March 1955, Kearny TrucTrain Terminal originally consisted of three ramps serving six trucks. With completion of the current expansion, Kearny has four ramps that will continue to be used with eight tracks for circus unloading, plus three new tracks for use with a TransTainer, a new mobile gantry-type crane for containers and trailers.

With the TransTainer, built by Pacific Coast Engineering Co. of Alameda, Calif., trailers or containers can be loaded or unloaded in any order desired. The machines, rated at 30 tons but designed to handle an occasional load of up to 40 tons, will lift any equipment up to a 40-ft trailer or container, using the bottom-lift principle.

The three TransTainer tracks have a capacity of 174 trailers. The tracks have respective capacities of 35, 29 and 23 85-ft cars. Each car can hold two trailers.

Each of the previously existing eight tracks can accommodate from eight to 11 piggyback cars each, for circus loading and unloading. Total capacity of the expanded yard is 159 cars, or 318 trailers, without switching. Parking facilities are available for 775 trailers.

Of the six trains handling piggyback trailers into and out of Kearny, one runs each way between Chicago and Kearny; one way between St. Louis and Kearny; and one makes the trip between Washington and Kearny. In addition, TrucTrain traffic is also handled —along with other cargo—on other high-speed freight trains between the 30 piggyback points on the PRR.

In addition to the expansion at Kearny, PRR is adding two ramps and two tracks for TrucTrain at Baltimore, doubling terminal capacity there. Track capacity at Cincinnati has been increased 50%. Parking area has been expanded at Baltimore and also at the Philadelphia terminal.

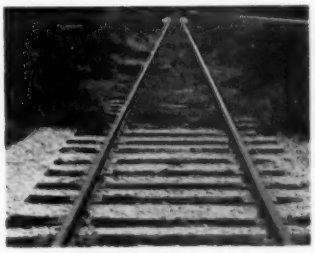
Picture Proof for Railroad Men!

UROX® KILLS WEEDS for a longer time, at lower cost!

That's right! With General Chemical's powerful UROX Weed Killer you can actually stop weeds on your system for a longer time and at lower cost than you ever thought possible, here's why:
UROX is so effective just one application wipes out weeds and brush for as long as 8-18 months! Results carry over, too! Because the effects of UROX are cumulative, herbicidal action can be continued year after year with small "booster" treatments. UROX is available in both liquid and granular forms.

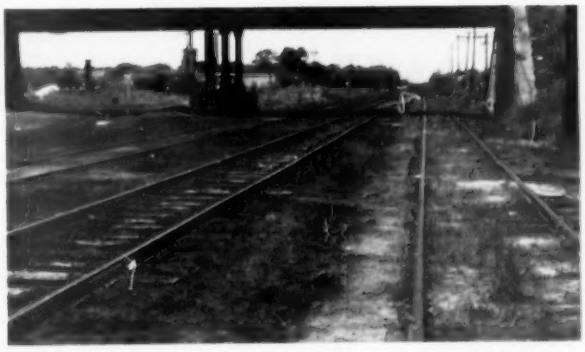
Clear the tracks! There's nothing that's going to interfere with top maintenance efficiency on this road. One treatment of UROX kept this road bed in top condition all season long.

This siding switch was covered with weeds until UROX was used to clean up the problem. Heavy vegetation problem is shown along side of the treated strip.



What happened here? You guessed it. UROX was used only in foreground for demonstration purposes. Dense Florida growth chokes the untreated background.

UROX is excellent along track installations like this perfectly maintained New Jersey tankcar loading depot.



Before applications of UROX were used, maintenance men could not hold down weeds here successfully. *After* one UROX treatment weed control is underway.

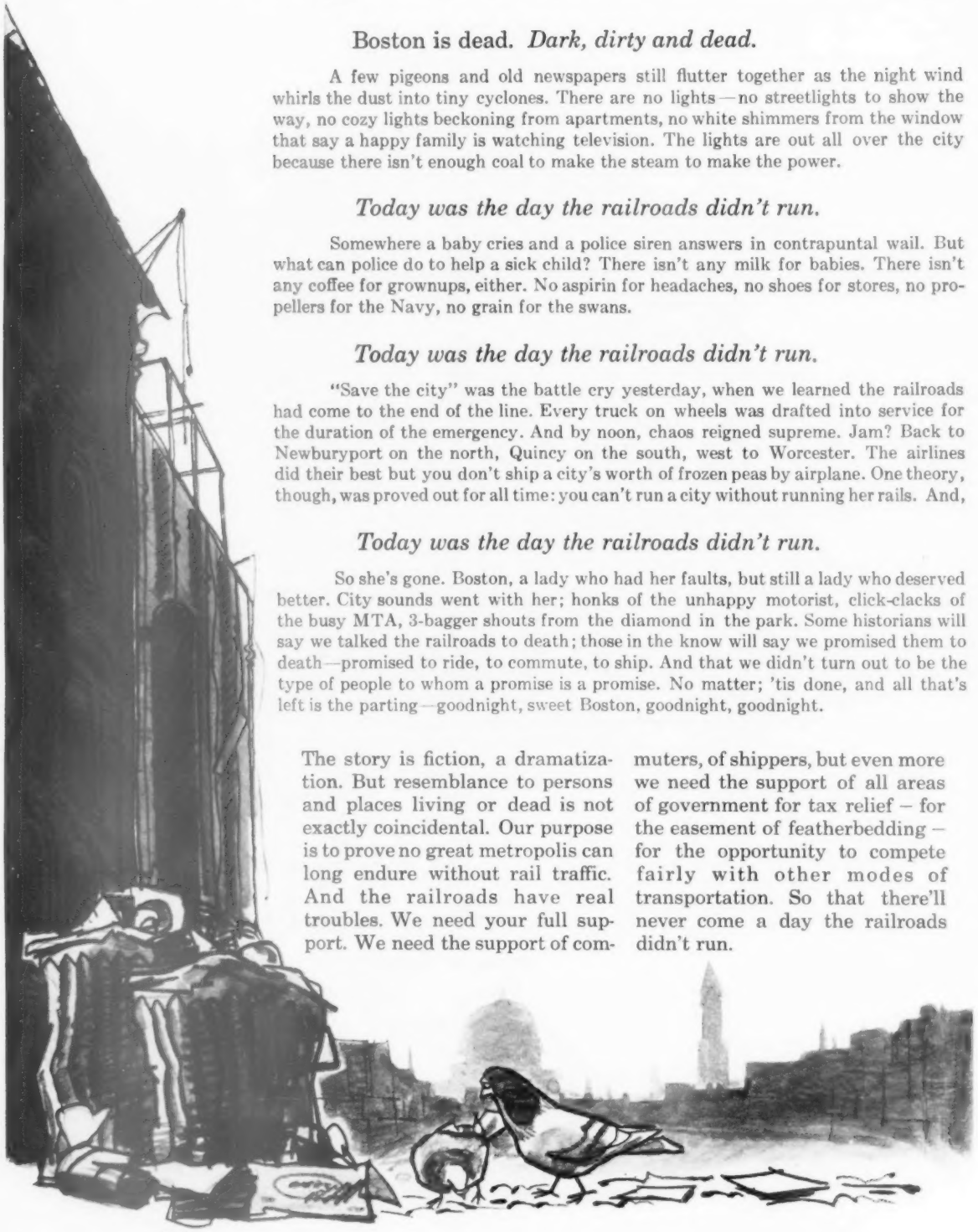
For more information on UROX and URAB, write, Weed & Brush Killer Dept. General Chemical Division, Allied Chemical Corporation, 40 Rector Street, New York 6, N.Y.

For brush control along right-of-ways, in yards, etc., Allied Chemical's URAB® kills toughest deep-rooted brush, briars, even weed trees . . . gives up to 100% control with a single application.

Allied Chemical

GENERAL CHEMICAL DIVISION
40 Rector Street, New York 6, N. Y.

Goodnight, Sweet Boston



Boston is dead. *Dark, dirty and dead.*

A few pigeons and old newspapers still flutter together as the night wind whirls the dust into tiny cyclones. There are no lights—no streetlights to show the way, no cozy lights beckoning from apartments, no white shimmers from the window that say a happy family is watching television. The lights are out all over the city because there isn't enough coal to make the steam to make the power.

Today was the day the railroads didn't run.

Somewhere a baby cries and a police siren answers in contrapuntal wail. But what can police do to help a sick child? There isn't any milk for babies. There isn't any coffee for grownups, either. No aspirin for headaches, no shoes for stores, no propellers for the Navy, no grain for the swans.

Today was the day the railroads didn't run.

"Save the city" was the battle cry yesterday, when we learned the railroads had come to the end of the line. Every truck on wheels was drafted into service for the duration of the emergency. And by noon, chaos reigned supreme. Jam? Back to Newburyport on the north, Quincy on the south, west to Worcester. The airlines did their best but you don't ship a city's worth of frozen peas by airplane. One theory, though, was proved out for all time: you can't run a city without running her rails. And,

Today was the day the railroads didn't run.

So she's gone. Boston, a lady who had her faults, but still a lady who deserved better. City sounds went with her; honks of the unhappy motorist, click-clacks of the busy MTA, 3-bagger shouts from the diamond in the park. Some historians will say we talked the railroads to death; those in the know will say we promised them to death—promised to ride, to commute, to ship. And that we didn't turn out to be the type of people to whom a promise is a promise. No matter; 'tis done, and all that's left is the parting—goodnight, sweet Boston, goodnight, goodnight.

The story is fiction, a dramatization. But resemblance to persons and places living or dead is not exactly coincidental. Our purpose is to prove no great metropolis can long endure without rail traffic. And the railroads have real troubles. We need your full support. We need the support of commuters, of shippers, but even more we need the support of all areas of government for tax relief – for the easement of featherbedding – for the opportunity to compete fairly with other modes of transportation. So that there'll never come a day the railroads didn't run.

BOSTON and MAINE RAILROAD

Maximum Control—Minimum Wear

The design makes the difference. Full rear bearing area protects the bolster. Longer springs take up what little wear results from years of use. Specify savings—specify Barber.

Standard
CAR TRUCK COMPANY

BARBER

Manufacturer of
BARBER Stabilized Trucks and center sill CUSHION TUBES

332 S. Michigan Ave., Chicago 4, Ill.

Six Penn Center Plaza, Philadelphia 4, Pennsylvania
Canada: Consolidated Equipment Co., Ltd., Montreal 2

1258

C AND O

Outstandability

Speed your shipments nationwide with Chessie connections

If your markets lead to or out of the richly endowed industrial corridor stretching from the Atlantic coast to the Midwest and Canada, you can benefit from the swift, dependable and economical services of Chesapeake and Ohio Railway.

Fast freight trains on Chessie's 5,100-mile system are scheduled to make convenient connections with other railroads at major interchange points, in any direction. Across Lake Michigan, the C&O Trainferry Route provides a year-round, east-west shortcut through planned connections with western lines.

CLIC (Car Location Information Center) reports promptly and accurately on the movement of any car on the Chesapeake and Ohio . . . can tell exactly when it is received from or delivered to another railroad.

Specify C&O routing, and you can count on the thorough cooperation of Chessie's network of 56 freight traffic offices from coast-to-coast, Canada-to-Gulf.

Chesapeake and Ohio Railway

TERMINAL TOWER, CLEVELAND 1, OHIO

Outstandability in Transportation

We develop, design and manufacture for you

the largest diesel-hydraulic multi-purpose locomotive of the world, type ML 4000 C'C', 4000 h.p.

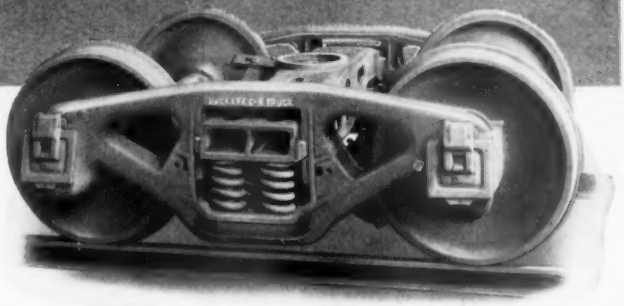
diesel locomotives with hydraulic power transmission for main, branch and industrial lines, for every gauge, axle load and output up to 4000 h.p.

KRAUSS-MAFFEI MÜNCHEN
GERMANY

Get Longer Service Life!

with

BUCKEYE C-R® TRUCKS
(CUSHION-RIDE)®



Specified for

TT

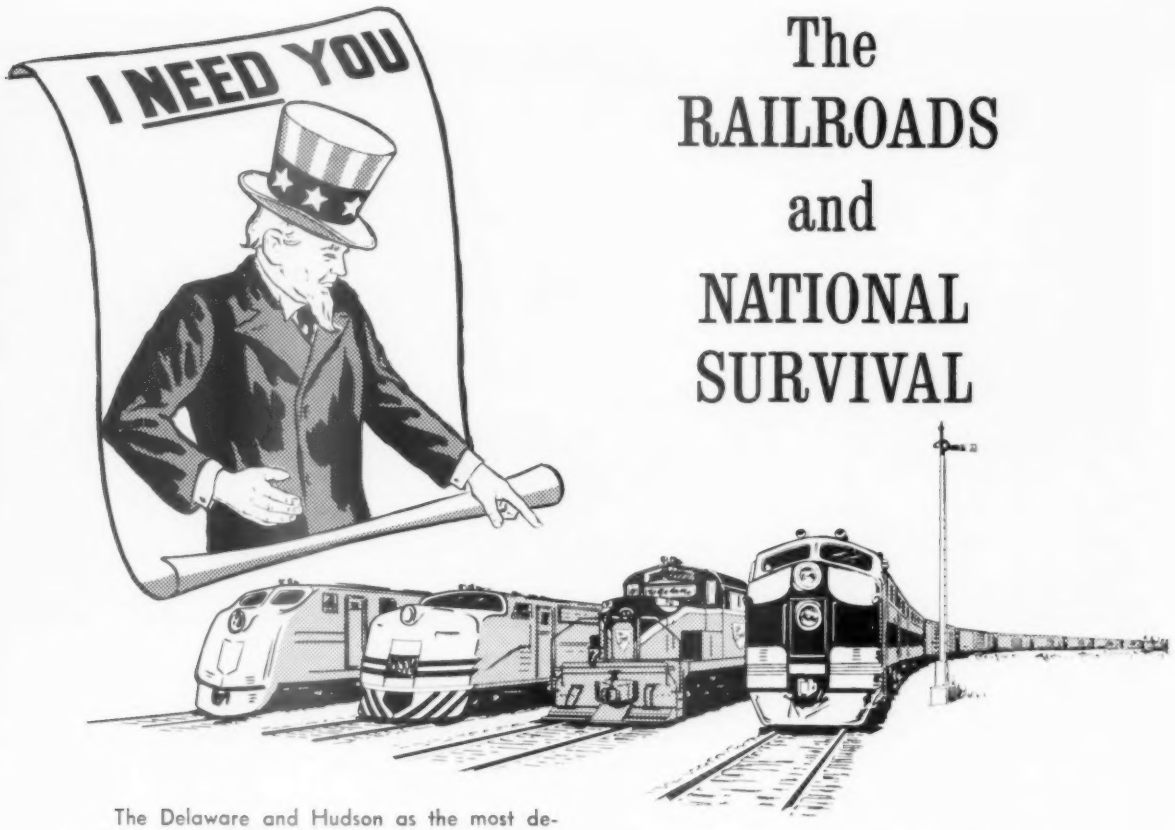
TRAILER TRAIN

FOR COMPLETE INFORMATION . . . CALL OR WRITE.
Refer Ad 11883

The Buckeye Steel Castings Co.

RPI MEMBER

COLUMBUS, O.
NEW YORK, N.Y.
CHICAGO, ILL.
ST. PAUL, MINN.
SAN FRANCISCO, CALIF.



The RAILROADS and NATIONAL SURVIVAL

The Delaware and Hudson as the most dependable link between New England, Eastern Canada and the rest of the United States is, like the rest of our railroads, vital to our economic well-being, to our national defense and, hence, to our national survival.

The railroads remain today as they have been in the past the most efficient and economic carrier ever developed. Our history has proved that economic health in time of peace and victory in war would be impossible without them. Yet the United States is being stripped of its railroad plant right before our eyes by the incredible blindness of governmental agencies, on all levels, to the seriousness of the railroads' plight and by their failure to take the necessary simple steps to preserve this valuable asset.

To do their job as the only true common carrier in the economic war we are already in, in the limited war for which we are preparing and for national survival, railroads must be strong. . . .

STRONG in personnel . . . in equipment
in track and structures
in finances . . . in profits

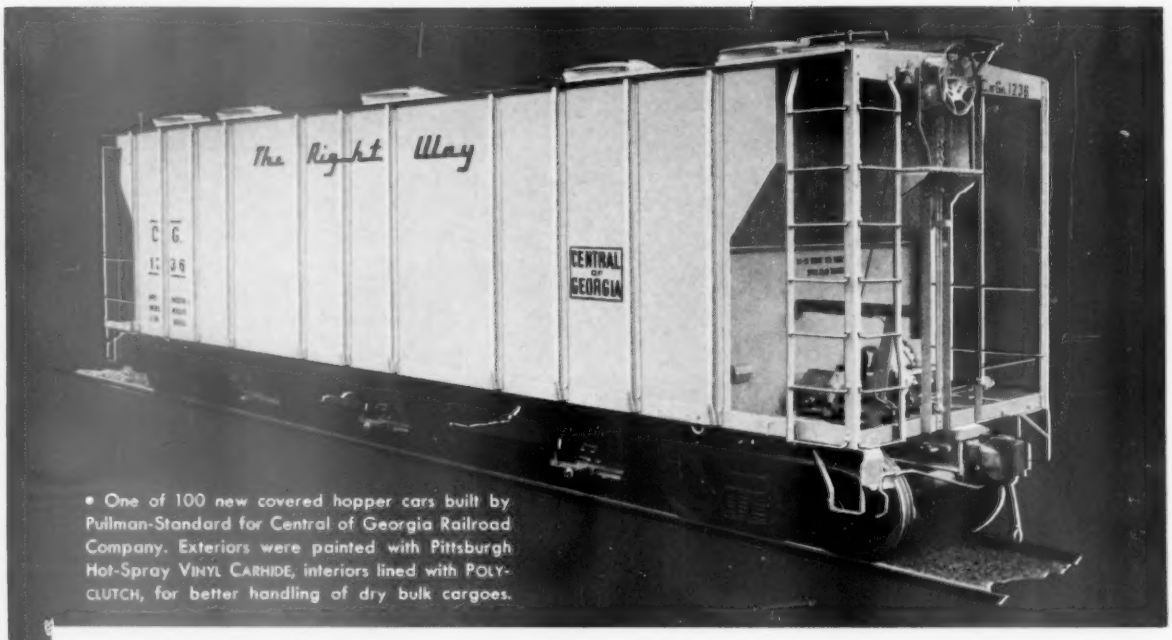
We repeat and emphasize PROFITS. "Profit" isn't a dirty word. Profit is the lodestone in our democratic economic system. Profit is imperative if railroads are to do the job expected of them. Without profit strength is sapped to the vanishing point. This is now happening.

Unless the railroads are given an opportunity to compete with other forms of transportation on a basis of equality so that they can make a profit, nationalization with all its attendant evils is inevitable.

The "railroad problem" has been studied to death. Now is the time for action. It is up to the administration and the Congress . . . and to the states.

Time is running out.

DELAWARE & HUDSON RAILROAD
CORPORATION
The Bridge Line Connecting the South and West with New England and Eastern Canada



• One of 100 new covered hopper cars built by Pullman-Standard for Central of Georgia Railroad Company. Exteriors were painted with Pittsburgh Hot-Spray VINYL CARHIDE, interiors lined with POLYCLUTCH, for better handling of dry bulk cargoes.

Two great finishes give covered hopper cars tough, armor-like protection . . . inside and out

CARHIDE®

Alkali- and acid-resistant exterior vinyl reduces maintenance

• **Improves appearance!** Resists abrasion, impact, thermal shock and the damaging effect of chemicals, moisture, salt air and industrial fumes.

• **Puts cars into service more quickly!** Saves time and labor, as one coat of primer and one color coat, applied hot, do the work of three coats of conventional finishing materials applied cold.

• **One-day painting schedules** are easily maintained because it dries so rapidly.

POLYCLUTCH® LINING

Makes dry cargoes easier to handle

• **Speeds loading and unloading!** Hard, nonporous surface assures maximum protection for dry bulk cargoes. Increases "slip and slide," checks clinging. Stops contamination losses because it's non-toxic, odorless and tasteless. Approved by U. S. Food Administration.

• **Easier, faster to apply!** Provides uniform "holiday-free" finish by hot, cold or hydraulic spray. Higher solids cover greater area per gallon. Because POLYCLUTCH is tougher, damage is reduced from impact, abrasion and repeated cleaning.

• **Many leading railroad companies** know by experience that exterior VINYL CARHIDE and POLYCLUTCH Lining do an outstanding job on covered hopper cars. Why not let us explain how these finishes can benefit you? Pittsburgh Plate Glass Company, Industrial Finishes, 1 Gateway Center, Pittsburgh, Pa.

PPG® **PITTSBURGH® PAINTS**

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS • FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

ANOTHER SUCCESS STORY FROM Freight Master

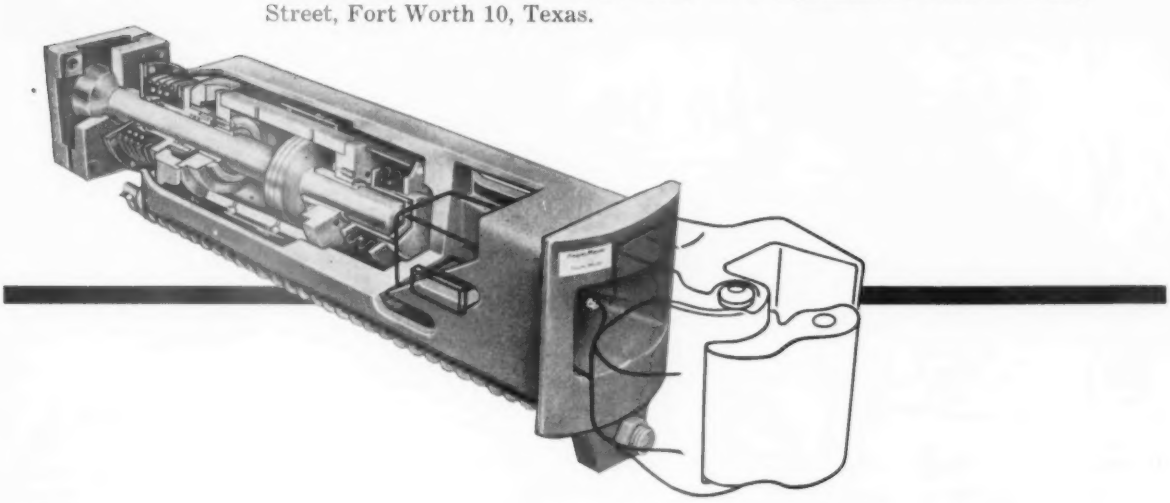
THIS FREIGHTMASTER CUSTOMER HAULED NEWSPRINT ALL YEAR...

WITHOUT A SINGLE CLAIM

Nearly 400 carloads of newsprint have rolled up close to a hundred thousand miles of proof that FreightMaster Hydraulic Cushioning Devices offer more freight protection per dollar than any other unit.

On October 31, 1961, FreightMaster-equipped cars marked a *full year* of completely claim-free newsprint shipments.

MAKE THE MOVE to FreightMaster. Your claims will be smaller — and your customers happier! Write today to FreightMaster, 1400 E. Berry Street, Fort Worth 10, Texas.



COMPARE THESE EXCLUSIVE FREIGHTMASTER FEATURES

Only practical, proven unit for application to *old* cars . . . and that protects *adjoining* cars.

Other features, too . . . absorbs enormous draft and buff forces • no uncontrolled recoil • converts shock into a controlled directional movement • does away with coupler droop • withstands angular impact • improves action and response of entire train.

GET THE FACTS ON FREIGHTMASTER

Complete details on benefits, design, and operation of the FreightMaster Hydraulic Cushioning Devices are available in this new brochure. Get your copy and see why FreightMaster belongs where you used to put the draft gear.

Freight Master®

1400 E. Berry Street, Fort Worth, Texas • A DIVISION OF **Halliburton** COMPANY

FreightMaster has received A.A.R. limited approval for use in general interchange service.

too good to be true?

Look at the picture. In the railroad cars are literally hundreds of shipments—all sizes, shapes, forms and weights—moving to hundreds of different destinations around the nation. All this with a *single source of power operating on a privately owned and maintained highway.*

No other means of transportation can match this for efficiency, economy and dependability!

It's true enough, but you—as a shipper, receiver and consumer—are being denied the full *economic* benefits of this unmatched service.

Obsolete regulations and indiscriminate subsidization of less efficient transportation do not permit Rio Grande to provide the complete, money-saving advantages inherent to its operation.

Unchain us . . . help establish a uniform national policy on transportation. Unleashing the full potential of modern railroad service will benefit everyone through more realistic competition between all transportation companies.

Meantime, enjoy the existing advantages of Rio Grande service. A carton or a carload, to the next city or across the nation, ship via Rio Grande, "The Shippers' Railroad."

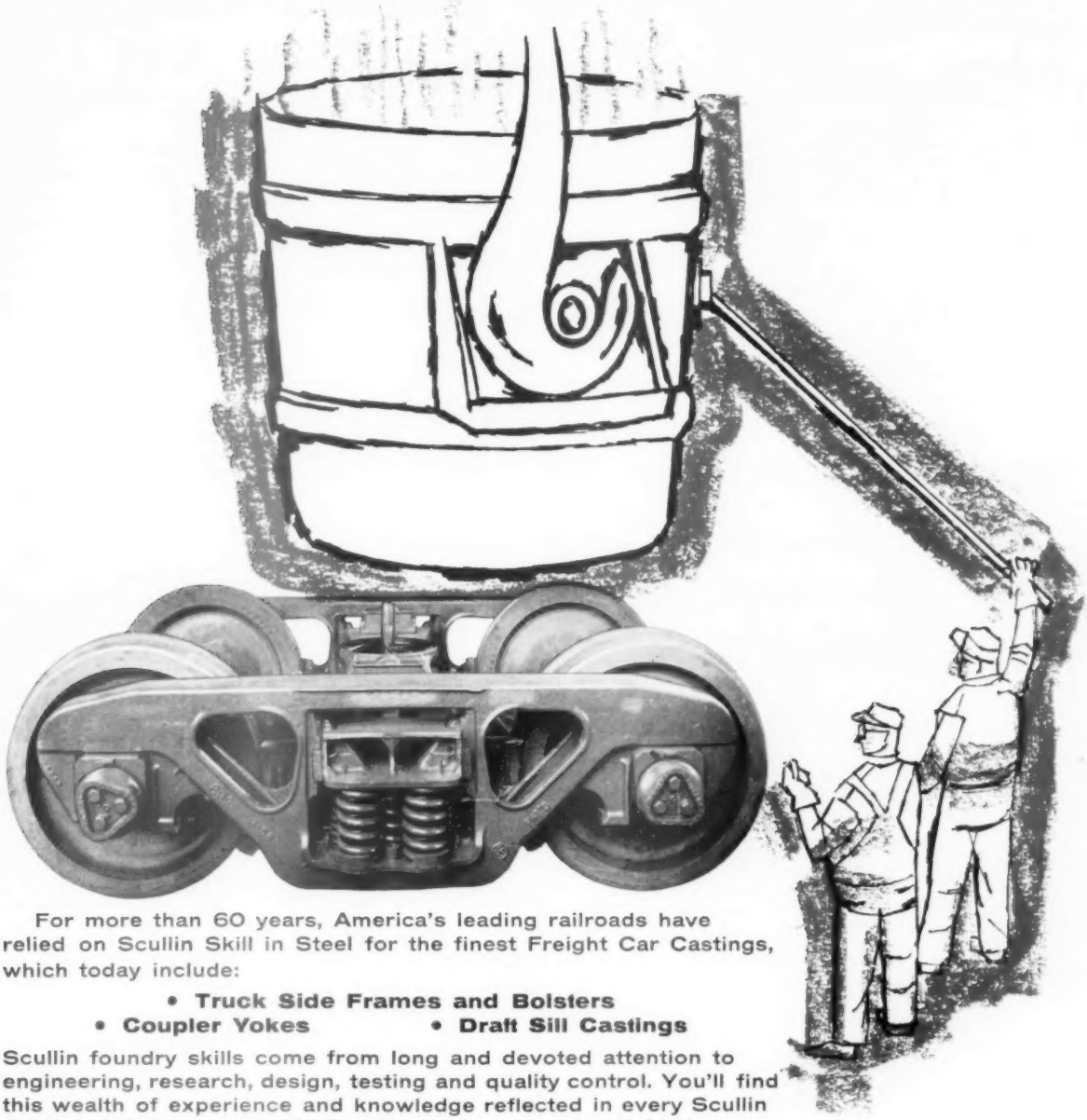
Rio Grande

R. KNOX BRADFORD,
Vice President—Traffic
Rio Grande Bldg., Denver, Colo.

DENVER & RIO GRANDE WESTERN RAILROAD

SCULLIN SKILL IN STEEL-

Your Assurance of PROVEN QUALITY, DEPENDABLE SERVICE, MINIMUM MAINTENANCE



For more than 60 years, America's leading railroads have relied on Scullin Skill in Steel for the finest Freight Car Castings, which today include:

- **Truck Side Frames and Bolsters**
- **Coupler Yokes**
- **Draft Sill Castings**

Scullin foundry skills come from long and devoted attention to engineering, research, design, testing and quality control. You'll find this wealth of experience and knowledge reflected in every Scullin Casting. When you specify Scullin, you're sure of satisfaction.

SCULLIN STEEL CO.

St. Louis 10, Missouri

A Division of Universal Marion Corporation

PRI MEMBER

STILL
THE WORLD'S
FINEST!

THE
positive
BRAKE BEAM

designed
FOR TOP EFFICIENCY
engineered
FOR RELIABILITY
manufactured
FOR DURABILITY AND LOW MAINTENANCE

ALL positive BRAKE BEAM PARTS ARE *RENEWABLE*

Tension strap pulls direct on compression member at interlocking point.

AAR NO. 18
CERTIFICATE 52

C-7

CHICAGO RAILWAY EQUIPMENT CO.

1928 W. 46th St., Chicago 9, Ill.

S-T-R-E-T-C-H

Your Maintenance of Way BUDGET DOLLARS

By Using

SPENO Ballast Cleaning Service

Rail Grinding Service

Our contract arrangement for these services obviates the necessity for any capital investment on the part of the Railroads and protects them as to cost for this type of work.

We have been servicing the Railroads continuously for over 45 years and have yet to lose a customer.

THERE MUST BE A REASON FOR THIS

Just Ask the Railroads That have used us!

RAILWAY PROGRESS INSTITUTE MEMBER

FRANK SPENO RAILROAD BALLAST CLEANING CO., INC.

Clark Street
East Syracuse, N. Y.

306 North Cayuga St.
Ithaca, N. Y.

FREIGHT CARS ROLLING

by Lawrence W. Sagle

Here is the complete one-volume account of the freight car—what it is, what it carries, how it operates, the little-known details of record keeping, and the outlook for the future. Scores of photographs specially selected for this book illustrate the text matter.

A vast amount of interesting and informative detail is given in the section on reporting cars "off line," the "foreign car," the work of the car service department, routing, mileage, car repair, and car inspection. The manner in which freight shipments are made, the work of the freight agent, the function of the freight house, and the business of the freight forwarding company are also explained.

A separate section is devoted to operating problems, and covers the work of the train conductor, schedules, train orders, the function of the classification yard and the break-bulk station, moving fast freights over the rails, and similar subjects which give the reader an inside view of this aspect of American transportation.

SIMMONS-BOARDMAN BOOKS
Dept. RA 12-4-61
30 Church Street
New York 7, New York

Send a copy of Sagle: FREIGHT CARS ROLLING, for which I enclose $5.00 (we pay postage if remittance accompanies order).

Name .....

Street .....

City ..... State .....

Cut "Clean-up" time in half... Make Freight car Markings cost less!

Because of its high paint-resistant qualities, stencils cut from *RESISTA-COTE* can be cleaned in half the normal time—or less. Effectively replaces and improves on oil stencil board and similar materials commonly used.

1. If paint is still wet, the stencil can be easily cleaned by blotting the paint with paper or newsprint. It is then as good as new.
2. If the paint is dry, the paint on the stencil can easily be peeled off in a fraction of the time normally required. Again the original stencil is as good as new!
3. Stencils cut from *RESISTA-COTE* can be used time and time again over a longer period.

When ordering, specify *RESISTA-COTE* Stencil Material for your freight car lettering and stencilling. Reduce clean-up time substantially and save the difference! Get better freight car markings in less time at less cost! Available in 36" width rolls or sheets.

***RESISTA-COTE* also ideal for lining spray booth walls and covering work areas where a "stick free" surface or finish is desirable.**

* Patent Applied For

DEMP NOCK

THE DEMP-NOCK COMPANY
21433 MOUND ROAD • WARREN, MICHIGAN

ANOTHER QUALITY PRODUCT BY DEMP-NOCK

New

FULLY TRANSISTORIZED POCKET 2-WAY RADIO

...versatile communications "tool" cuts costs...speeds railroad service

Motorola engineering has shattered all previous concepts of pocket 2-way radio design. The first completely transistorized transmitter and companion receiver give you new communications flexibility . . . new convenience and dependability with operating costs counted in pennies. The transmitter can be held in one hand . . . just press the button and talk. The pocket receiver has been proved on the job . . . provides clear, crisp message reception even in high noise areas. Now, the man-on-the-ground can maintain full radio contact with: **1.** other men-on-the-ground, **2.** yardmasters or foreman, **3.** engine crews. Car inspection . . . car checking . . . trimmer engine control are just a few uses for the versatile pocket radio—call on Motorola for full facts.

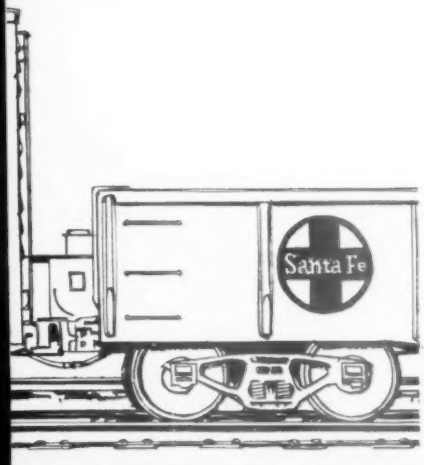
MOTOROLA
2-WAY POCKET RADIO

NOW, FOR THE FIRST TIME, YOU CAN HAVE A POCKET RADIO SYSTEM TOTALLY FREE FROM TUBE FAILURE AND HEAVY CURRENT REQUIREMENTS

The first completely transistorized Pocket Transmitter . . . new small size . . . greater dependability. Delivers a full ½ watt output for extensive communications coverage—transmission is consistent over a long battery life. Measures 5⅛"x2¼"x1⅛", weighs 14.5 oz. Uses standard mercury cells or rechargeable nickel-cadmium batteries.

The completely transistorized Pocket Receiver is proved . . . compact . . . powerful . . . another Motorola first! Weighs 13 oz., measures 5¼" x 2½" x 1⅜", provides ½ watt audio output. Where needed, lapel speaker and auxiliary antenna plug-in without modification. Uses standard mercury cells or rechargeable nickel-cadmium batteries.

Why not learn how Motorola 2-way Pocket Radio can do-the-job for you . . . send this coupon today



MOTOROLA COMMUNICATIONS & ELECTRONICS, INC.
A Subsidiary of Motorola, Inc.
4501 Augusta Blvd., Chicago 51, Illinois

☐ Mail me full fact kit on 2-way Pocket Radio No. ARA 149
☐ Have railroad representative telephone for appointment.

Name_____Title_____
Railroad_____
Address_____Phone_____
City_____Zone____State_____

RAILROADING AFTER HOURS WITH JIM LYNE

COST vs. PRICE—I read a newspaper report the other day about the trouble that has arisen on the St. Lawrence Seaway—since the ditch isn't taking in the revenues that were expected. The piece wound up with the observation that there's talk in Administration circles about laying toll charges on the Ohio and Mississippi waterways—but:

"Shipping and trade interests are violently opposed, and warn that such tolls would diminish or wipe out the role of low-cost water transport in industrial development."

This all goes back to my suspicion that these waterway people just don't know the difference between *cost* and *price*. The cost of a service is the total expense it entails to everybody (including taxpayers' contributions, if any). The price is that part of the expense paid by the purchaser of the service. It may be higher or lower than, or equal to, the cost.

A nation increases in wealth by doing its work at lowest possible cost—not just at lowest prices, because (as in the case of barge transportation) the price may be much less than the actual cost.

It's strange indeed that so many business people reveal their economic illiteracy by fumbling so basic and simple a problem as this.

JAPAN'S RAILWAYS BOOMING—The Japanese National Railways have issued the 1961 edition of their "Facts and Figures," a booklet which is a dead ringer for the similar handy information pamphlet issued each year by the three regional railroad associations in the U.S.A.

The railway statistics from Japan are mighty heartening. The railways are expecting that 1975 traffic will be double that of 1956—in passengers as well as freight. Ton-kilometers in 1960 were at an index number of 329, compared to 305 in 1959 and 100 in 1936. Passenger-kilometers were up 8.6% in 1960 over 1959, and were almost five times the 1936 total.

The "Facts and Figures" reports progress on the 310-mile Tokaido line, standard gage, now under construction—where it is planned to operate passenger trains at 124 mph.

'ORIENT' NOW COMPLETE—That "Orient" line—hooking up the Southwest with the Pacific at the port of Topolobampo—has finally been completed. I note that Mexico's President Lopez Mateos formally opened up the connecting link a few days ago.

This was the line originally promoted and started by the late A.E. Stilwell, as private enterprise, before Mexico went in for government ownership. It really does cut down the distance to the Pacific, but at the expense of some pretty rugged railroading through the mountains.

SEEN ANY LIONS LATELY?—I've just been reading a special supplement to "Spear"—the magazine of East African Railways and Harbors—which tells about "The Kima Killer," a man-eating lion which terrorized a section of the railway back in 1900. The man-eater's crowning exploit was going into a parked sleeping car at night and devouring a superintendent of railway police, C.H. Ryall, who was at that location for the express purpose of catching the killer. The animal was into the compartment and at his deadly work before any of the crew had detected his presence.

Railroaders have always been warned that their calling is not necessarily the safest in the world—but, it would appear, there are times and places when it has been exceptionally hazardous.

LOYAL TRAIN RIDER—Cleland Wyllie, who is on the staff of the University of Michigan, doesn't go along with my tentative opinion that railroads that can't afford high-grade passenger service, maybe, would do better not to offer any such service at all.

C.W. travels 7 to 10 thousand miles a year by rail, and enjoys it—but he believes railroads could do better than they do by (1) closer co-operation with each other; (2) ending the coach and first-class distinction by having one fare, with charges higher than at present for sleeping car or other such space assignments; (3) improving employee morale, by reassuring those employees whose jobs are actually in no jeopardy.

Inter-railroad cooperation (in changing passengers over from one road to another, for instance) would certainly be a big help. It's possible, too, because the airlines do it all the time, with a minimum of delay and red tape.

Even roads that can't afford to spend big money on improved service could act cooperatively with other lines on joint arrangements.

ASF E·X·T·E·N·D·E·D L·I·F·E® SPRINGS

NO BETTER SPRING IS AVAILABLE

NO OTHER SPRING IS BETTER BUILT FOR FREIGHT CAR USE, BECAUSE

The Extended Life Spring has built-in reliability, durability and performance that outlast conventional double heat treated springs at least 2 to 1

The headline above speaks for itself. *There is no better spring available!* It is the firm conviction at American Steel Foundries that even the finest product can be improved. It has been this conviction throughout the Hammond Division's 50 years as a spring manufacturer that has brought the industry's only improvements in railroad load carrying coils. In 1948, ASF introduced the long travel springs; in 1955 came the first Extended Life Springs and in 1957, the Direct Controlled Quench process. Today, this Extended Life manufacturing process unequivocally assures you of coil springs, unequalled in reliability, durability and performance. Proof of these factors is highly demonstrable! Extensive test data have been accumulated from experience in laboratory and actual service. And remember, Extended Life Springs *cost no more* than conventionally produced springs. Contact your nearest ASF Sales Agent or write direct . . . now!

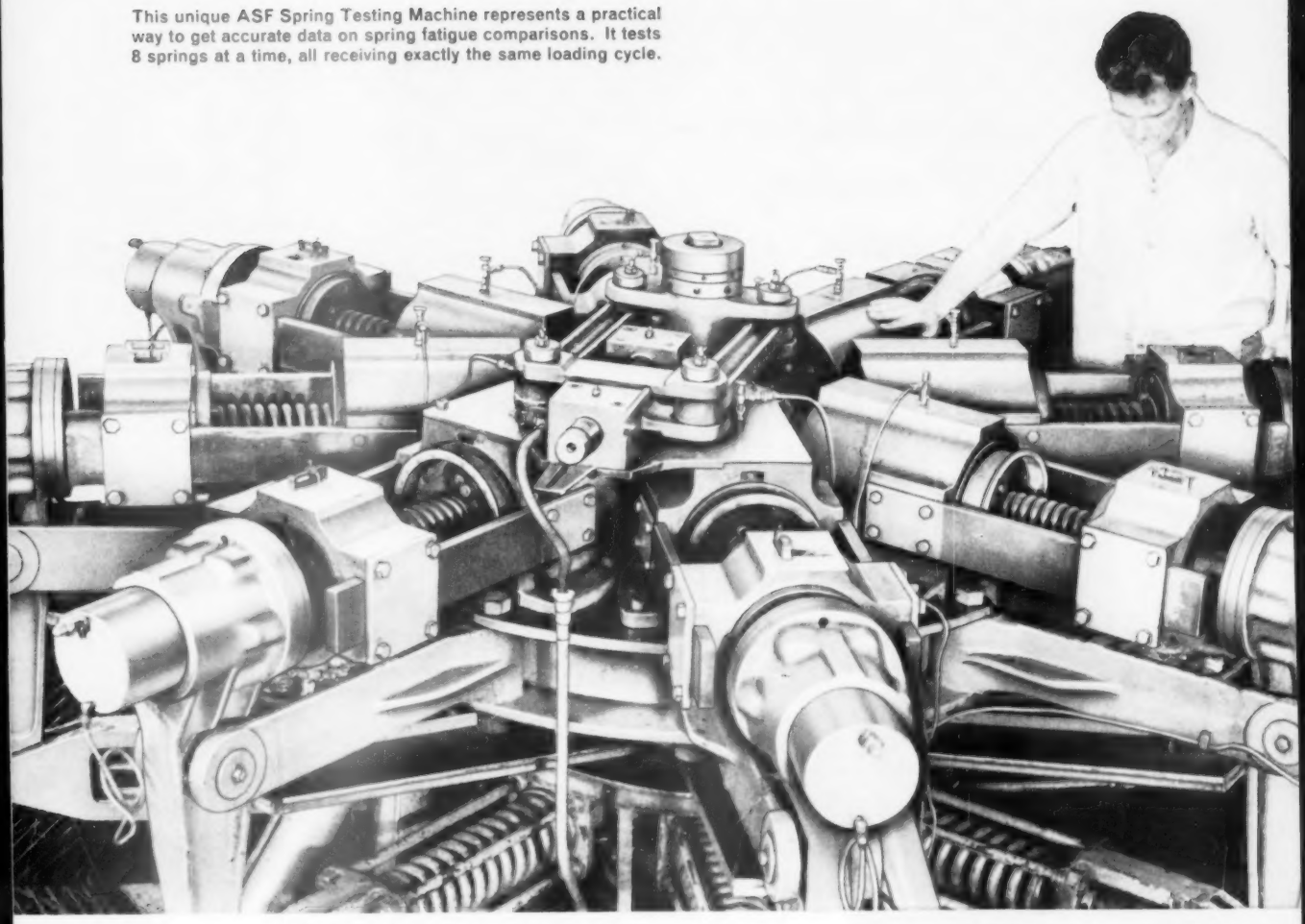
AMERICAN STEEL FOUNDRIES

HAMMOND DIVISION ASF HAMMOND, INDIANA

SALES AGENTS: Otto Bussenius & Co., Chicago, Illinois; The Walton R. Collins Co., Inc., New York, New York; Harry E. Connors, St. Paul, Minnesota; Delano & Co., Jacksonville, Florida; Mells Cargo Supply Co., Inc., San Francisco, California; Mountain Region Supply Co., Omaha, Nebraska; Progress Railway Supplies, Inc., St. Louis, Missouri.

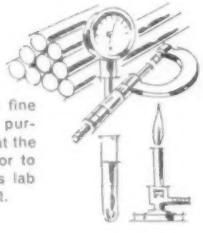
MANUFACTURED AND SOLD IN CANADA by the International Equipment Co., Ltd., Montreal 1, Quebec.

This unique ASF Spring Testing Machine represents a practical way to get accurate data on spring fatigue comparisons. It tests 8 springs at a time, all receiving exactly the same loading cycle.



6 REASONS WHY ASF E·X·T·E·N·D·E·D L·I·F·E SPRINGS ARE "BETTER BUILT"

1 BAR STOCK SELECTION

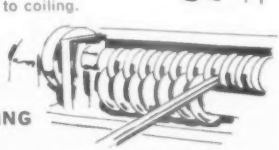


Only special bar quality fine grained spring steel is purchased. It is inspected at the supply source first. Prior to production, it undergoes lab analysis and heat pretest.

2 HEATING FOR COILING

A gas fired, continuous feed furnace maintains extremely uniform temperatures for maximum control and minimum scaling. Assures minimum heat loss prior to coiling.

3 COILING



Only seconds lapse from furnace through the coiling operation. Complete control assures the proper hardening temperature prior to quenching.

4 DIRECT CONTROLLED QUENCH

An electric eye control admits *only* properly heated springs to the quench bath. Exacting temperatures and time control in the bath assure the most uniform possible hardening from the quench.

5 SHOT-PEENING

After tempering, the spring surface is cold worked and compacted introducing compressive stresses. This is not merely a cleaning operation. The resultant compressive stresses make greatly improved fatigue life, resistance to cyclic stresses.

6 SURFACE COATING

All springs are finished with a specially designed Clear-Coat. This gives rust protection and allows close visual inspection.

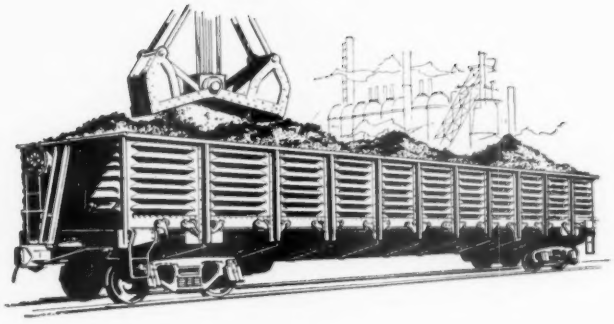
X-L® SPRINGS Cycles to Failure, or Cycles to Test Termination	D.H.T. SPRINGS Cycles to Failure
1,230,600 *	202,100
1,564,900 *	251,200
1,778,100 *	345,700
2,676,500**	369,000
2,965,200**	400,000
2,979,700**	414,600
3,010,300**	457,900
3,025,200**	531,500
AV. OVER 2,403,800	Av 371,500

Extended Life Springs taken at random from production stock averaged 2,403,800 cycles at test conclusion

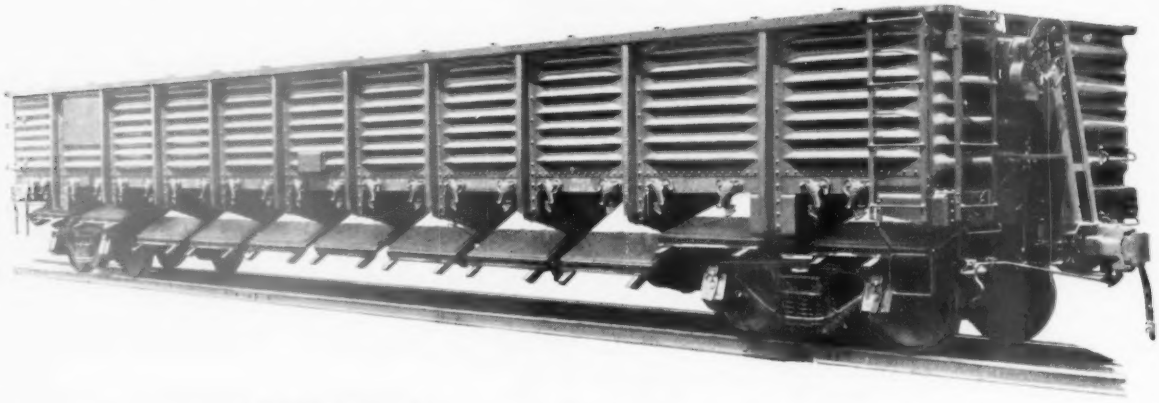
All double heat-treated springs taken at random from production stock failed after average of 371,500 cycles

*Fractured **Not Failed, Test Terminated

...takes the mauling of rugged hauling



STANDARD RAILWAY'S
Gondola Sides and Ends



Drop-bottom open . . .

and closed tight.

Few types of rolling stock are expected to take the beatings and absorb the punishment of lading and hauling that gondola cars must take. Their life frequently is limited by the very nature of the job they do.

Standard Railway's new strong, rugged corrugated steel sides with improved Dreadnaught Steel Ends combine to create a super-solid gondola structure that gives years of service without maintenance—years of extra life.

The corrugations between side stakes make the difference. The sides remain strong and straight longer than any other type side in railroad service today. Improved Dreadnaught Steel Ends with Lading Straps provide extra strength to resist bulging, regardless of the lading.

For complete information, write or contact your *Standard Railway representative, Hammond, Indiana.*

STANDARD RAILWAY EQUIPMENT
division of STANRAY CORPORATION
HAMMOND, INDIANA • NEW YORK • CHICAGO • SAN FRANCISCO

BACKBREAKING FALLOUT! by Hungerford

We will be glad to send you enlarged copies of this Hungerford cartoon (without advertising copy) for posting on your office and shop bulletin boards, or a cut for your company magazine, at cost.

Edgewater Rolled Steel Wheels

for Freight Cars Passenger Cars Diesel Locomotives

Edgewater Steel Company
PITTSBURGH 30, PA.

TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS

Switching is FASTER . . . . at ST. LOUIS

Pre-Blocked Freight Service

Instant Car Tracing

Electronic Data Processing

Radio Controlled Operation

Mechanized Maintenance

101 Diesel Locomotives

Choice Industrial Sites

Production-Line Freight Car Repairs

Speed and dependability are essential weapons today in the railroad industry's fight against subsidized competition, discriminatory regulation, and discriminatory taxation.

Terminal Railroad Association designs its operations to match the virtual revolution in plant and operating methods now taking place on the American railroads.

Through its "pre-blocking" program and by the use of the latest techniques . . . electronic data processing . . . radio-dispatched locomotives . . . and production line freight car repairs, TRRA provides the St. Louis gateway with fast, dependable service at the lowest possible cost.

SERVING AMERICA'S MAINLINE SINCE 1910

ACHUFF RAILWAY SUPPLY CO.

5627 MANCHESTER AVENUE

ST. LOUIS 10, MISSOURI

FUNDAMENTALS OF PROFESSIONAL MANAGEMENT by John G. Glover

This authoritative book presents an up-to-date treatment of the principles of management. It presents a systematic approach to the subject with broad coverage of the field from the underlying philosophy of management to the work-saving potential of automation. Thorough treatment of the basic principles of management makes the book invaluable for both the student and the younger executive. More advanced materials on such subjects as research resources, budgetary control, linear programming and automation provide a strong appeal for the seasoned executive who seeks an authoritative and compendious statement of the more recent development in management techniques.

406 pp. illus. 6 x 9. Cloth. $6.50

TO ORDER—Clip the coupon and mail to Simmons-Boardman's New York office. Orders placed outside United States should be accompanied by remittance in United States funds by draft or international postal money order.

Simmons-Boardman Books RA. 12-4-61, 30 Church St., New York 7, N.Y.

Please send Glover: FUNDAMENTALS OF PROFESSIONAL MANAGEMENT, for which I enclose $6.50
(NOTE: Add 50 cents per book ordered for handling and shipping.)

Name ..... Street .....

City ..... Country .....

PEOPLE IN THE NEWS

ATLANTIC COAST LINE.—**W. Eli Hand,** comptroller, Jacksonville, Fla., elected vice president—accounting, effective Dec. 1.

CANADIAN NATIONAL.—**Cyril D. James,** associate manager of passenger promotion since March, appointed manager of passenger promotion, system, Montreal, Que.

CANADIAN PACIFIC.—**W. G. Wiley,** assistant general freight agent, Chicago, promoted to general freight agent, New York, succeeding **T. M. Holland,** who retired Nov. 30 after 41 years of service.

CHICAGO UNION STATION.—**J. M. Crevie** appointed office engineer, replacing **M. B. Wood,** advanced to office manager, general manager's office.

DETROIT & TOLEDO SHORE LINE.—**Lou Sabo** appointed superintendent motive power and equipment, Lang Yard, Toledo, Ohio, succeeding **John H. Walton.**

FRISCO.—Has announced the following appointments at Springfield, Mo.: **T. H. Temple,** superintendent motive power; **O. H. Summers,** assistant superintendent motive power; **J. P. Knox,** superintendent car department; **C. A. Andereck,** assistant superintendent car department; **G. J. Cosatt,** manager planning and scheduling; **F. G. Trau,** mechanical engineer; **J. L. Ryan,** assistant to chief mechanical officer.

NEW HAVEN.—**Samuel W. Hutchings,** freight traffic manager—special services, New Haven, has been assigned responsibility for all sales and services contacts on TOFC operations. **Joseph P. Dowling,** manager TOFC, New Haven, has resigned to accept a position with Berman Services, Chicago.

NICKEL PLATE.—**Robert P. Murray** appointed general agent, Louisville, Ky., succeeding the late **Albin E. Orsinger.**

NORFOLK & WESTERN.—**William C. McIntosh,** assistant district manager, coal traffic, Roanoke, Va., promoted to district manager, coal traffic there, succeeding **Ralph L. Hawkins,** retired after 45 years with the N&W. **Henry L. Tiller, Jr.,** succeeds Mr. McIntosh. **Robert E. Tissue,** commercial agent, Durham, N. C., appointed general agent there, succeeding **Paul W. Blenn,** retired.

RICHMOND, FREDERICKSBURG & POTOMAC.—**Milton J. Elliott, III,** associate editor of the Commonwealth magazine, published by the Virginia State Chamber of Commerce, named a special representative, public relations, RF&P, Richmond, Va.

SANTA FE.—**C. R. Rose** named acting assistant superintendent, Kansas City division, Argentine, Kan., succeeding **G. E. Becker,** on leave of absence.

SEABOARD.—**Raymond E. Moore,** assistant vice president — finance and accounting, Richmond, Va., elected vice president of finance. **W. Vernon Lawrence,** comptroller, elected vice president and comptroller.

SOUTHERN.—**Fred E. Moore,** commercial agent, Norfolk, Va., promoted to general agent there and is succeeded by **Hugh M. Palmer.**

(Continued on page 105)

W. Eli Hand
ACL

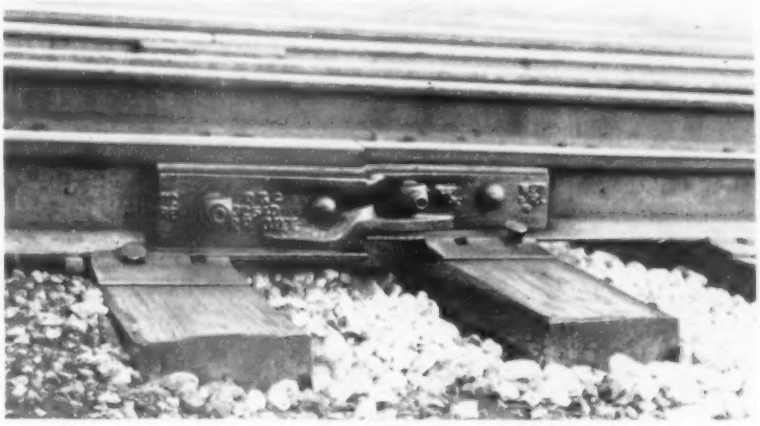
Cyril D. James
CN

Raymond E. Moore
Seaboard

W. Vernon Lawrence
Seaboard

Q AND C STEP JOINTS

used . . . proven . . . preferred!



Q and C Compromise Joints have set a notable in-service record for accuracy and dependability.

MAXIMUM DEPENDABILITY—They are designed with particular reinforcement at the center—where strength is vital for maximum rail-end durability—and made of alloy cast steel or of rolled and forged steel, heat treated, to bear the impacts of heavy service.

PREVENT RAIL-END BATTER—We can provide the most suitable surface to prevent batter on rail-ends—just specify the average allowance for head wear on old rails—further reducing maintenance cost.

Let Q and C Compromise Joints demonstrate real economies on the strength of merit. Ask for them on your next requisition.

THE Q AND C DIVISION
Serving Railroads Since 1886

of WRRS
WESTERN RAILROAD SUPPLY COMPANY
2742 West 36th Place • Chicago 32, Illinois
Canada: Lyman Tube & Supply Company, Ltd., 5420 Pare Street, Montreal 9, Quebec

1191

8 1/2 HOURS ...Detroit to Cincinnati!

AVAILABLE FOR INDUSTRIAL EXPANSION!

An attractive brochure is now available giving salient facts on sites available including acreage, topography, environment, power, water, sewers, utilities and taxes. This brochure can save you much time and effort. For your copy, wire, write or phone—

D. C. Schreiber, Vice President, Traffic
Schaefer Bldg., Dearborn, Mich., LU 4-9000

"We have the DETROIT TOLEDO IRONTON RAILROAD CONNECTIONS"

Passenger train speed is the service your shipments receive when routed over the D. T. & I. Railroad. It literally WHISKS your freight from the "motor-city" to the "gateway-to-the-South." En route from Detroit to Ironton the D. T. & I. connects with every major East-West railroad—in addition to many North-South lines—featuring "country junctions" which avoid long, terminal delays. It makes regular and heavy interchanges with scheduled stops of connecting carriers' fast freights giving you a wide choice of dependable routes in all directions.

Be sure you get this fast, passenger train delivery, by specifying D. T. & I. on your freight into and out of Detroit.

DETROIT-TOLEDO AND IRONTON RAILROAD

D. E. Smucker, President • Schaefer Building • Dearborn, Mich.

(Continued from page 103)

SOUTHERN PACIFIC.—James G. Sinclair appointed division engineer, San Joaquin division, Bakersfield, Calif., to succeed **J. S. McCauley**, deceased.

UNION PACIFIC.—George A. Brown, traffic manager, Denver, transferred to the Northwestern district, Portland, to replace **Carl W. Evers**, deceased.

OBITUARY

Albert E. Spette, former general passenger agent, **New Haven**, at New York, died Nov. 20 at the Lawrence Hospital, Bronxville, N. Y., after a brief illness.

Supply Trade

H. L. Kent has been appointed director of marketing of **Stanray Corp.**, Chicago. Mr. Kent was formerly eastern district sales manager for the Standard Railway Equipment Division.

John W. Hutchison, Jr., has been appointed motive power market manager, **Exide Industrial Marketing division, Electric Storage Battery Co.**, Philadelphia, Pa., succeeding **O. L. Robertson**, who will handle special assignments on national sales accounts in the telephone field. For the past two years Mr. Hutchison has been national motive power market supervisor. In his new position Mr. Hutchison will direct Exide's national sales effort for batteries and associated equipment used in electrical industrial materials handling trucks and mine locomotives.

K. F. Sheeran, sales representative, **Simmons-Boardman Publishing Corp.**, Chicago, elected regional vice-president. Mr. Sheeran will represent Railway Age, Railway Purchases & Stores, and other S-B publications.

Harold H. Hauck, assistant sales manager for railroad tooling at **Vascoloy-Ramet Corp.**, has announced the appointment of **Carriers Supply Co.**, 818 Olive Street, St. Louis, Mo., as an authorized sales agent for carbide cutting tool products manufactured by Vascoloy-Ramet especially for railroad use. Carriers Supply Co. will service the following roads and manufacturers: Missouri Pacific, Wabash, Cotton Belt, Manufacturers Ry. (St. Louis Refrigerator Car Co.), Illinois Terminal, Chicago & Illinois Midland, Terminal RR Assn. of St. Louis, American Refrigerator Transit Co., Alton & Southern, Kentucky & Indiana Terminal, and St. Louis Car Co.-Division of General Steel Castings.

The Electronic Data Processing Division of **Minneapolis-Honeywell Regulator Co.** has announced the appointment of **Edward S. Ferrara** as special representative to the transportation industry.

H. L. Kent
Stanray

John W. Hutchison, Jr.
Exide

Dividends Declared

AKRON, CANTON & YOUNGSTOWN.—common, 40¢, payable Jan. 15, 1962, to holders of record Jan. 2.

BESSEMER & LAKE ERIE.—$3 preferred, $1.50, semiannual, paid Dec. 1 to holders of record Nov. 15.

CHESAPEAKE & OHIO.—common, $1, quarterly, payable Dec. 20 to holders of record Dec. 1; 3½% convertible preferred, 87½¢, payable Feb. 1, 1962, to holders of record Jan. 5.

DELAWARE & BOUND BROOK.—50¢, quarterly, paid Nov. 20 to holders of record Nov. 13.

ERIE & PITTSBURGH.—guaranteed stock, 87½¢, quarterly, payable Dec. 11 to holders of record Nov. 30.

KANSAS, OKLAHOMA & GULF.—6% preferred, $3, semiannual; 6% preferred C, $3; 3% preferred, $6, all paid Dec. 1 to holders of record Nov. 20.

MISSOURI PACIFIC.—Class A, 60¢, quarterly, payable Jan. 2, 1962, to holders of record Dec. 15.

NEW YORK, CHICAGO & ST. LOUIS.—50¢, quarterly, payable Jan. 2, 1962, to holders of record Dec. 1.

OAHU RY. & LAND.—50¢ quarterly; 40¢ extra, both payable Dec. 12 to holders of record Dec. 1.

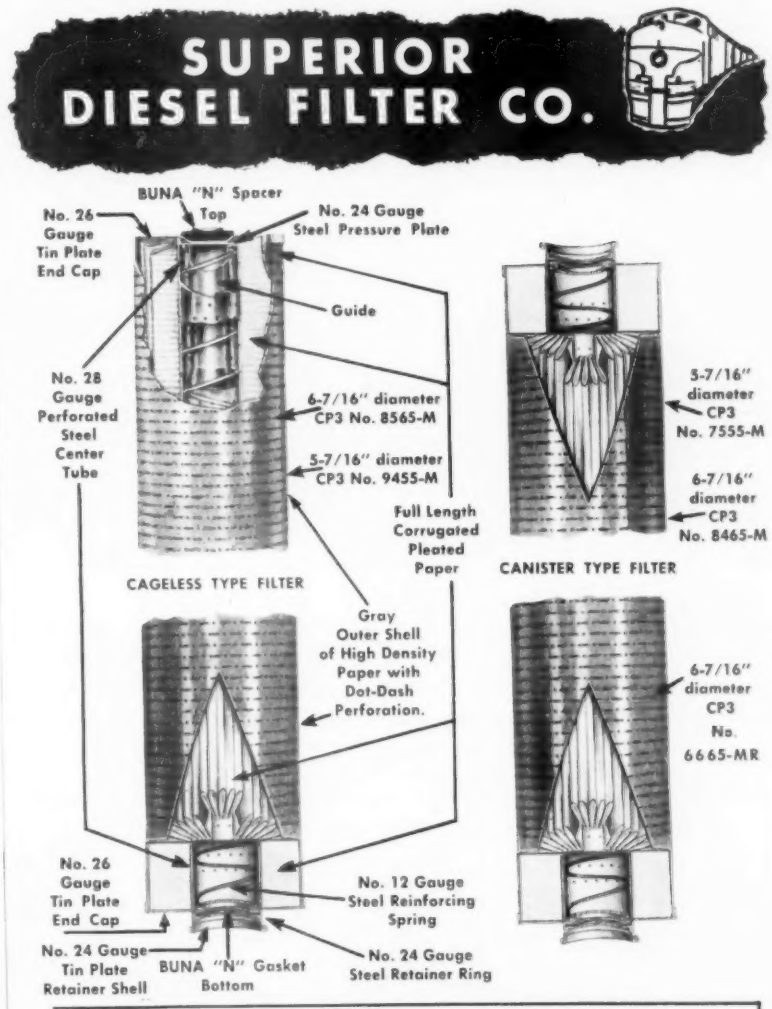
RICHMOND, FREDERICKSBURG & POTOMAC.—common and dividend obligations, $1, quarterly, and 75¢, extra; 6% and 7% guaranteed, extra dividend, $1.75, all payable Dec. 15 to holders of record Dec. 1.

ST. LOUIS SOUTHWESTERN.—$7.50, paid Dec. 1 to holders of record Nov. 24.

SOUTHERN PACIFIC.—30¢, quarterly, payable Dec. 18 to holders of record Nov. 27.

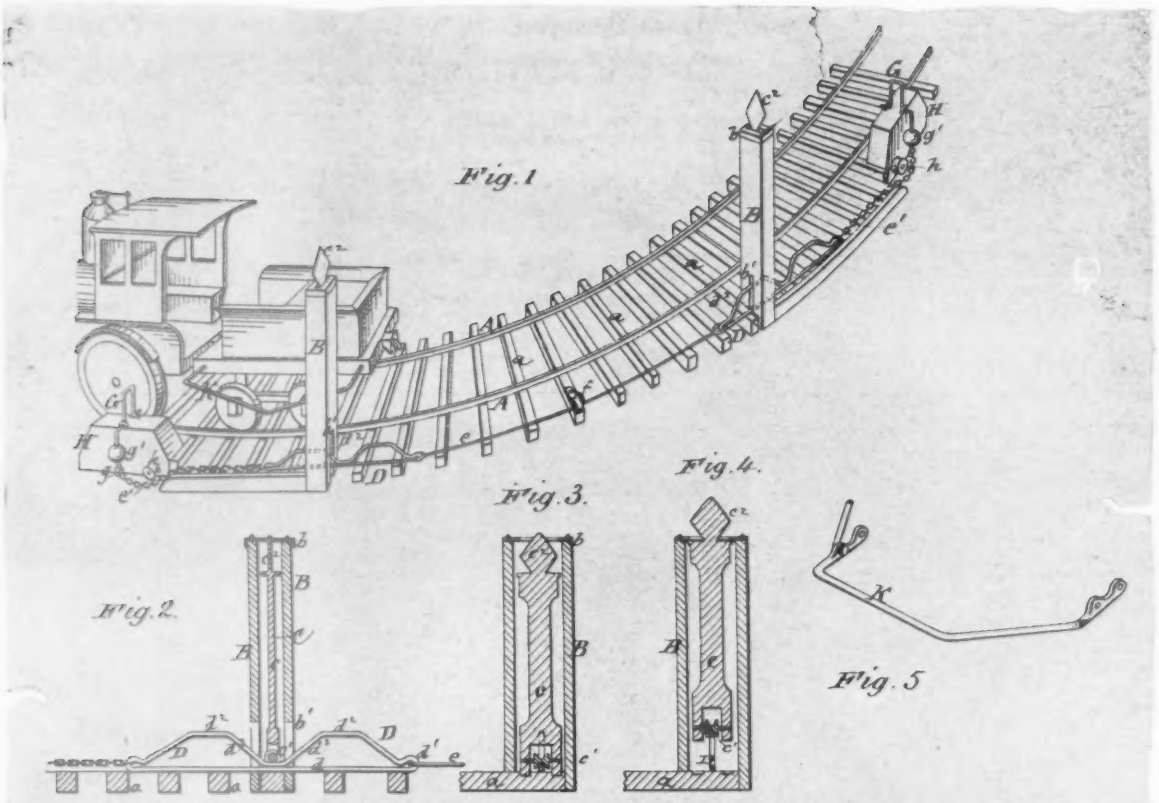
WEST JERSEY & SEASHORE.—$1.50, semiannual; special guaranteed, $1.50, semiannual, both payable Jan. 2, 1962, to holders of record Dec. 15.

SUPERIOR DIESEL FILTER CO.


BUNA "N" Spacer Top
No. 26 Gauge Tin Plate End Cap
No. 24 Gauge Steel Pressure Plate
Guide
No. 28 Gauge Perforated Steel Center Tube
6-7/16" diameter CP3 No. 8565-M
5-7/16" diameter CP3 No. 9455-M
Full Length Corrugated Pleated Paper
CAGELESS TYPE FILTER
5-7/16" diameter CP3 No. 7555-M
6-7/16" diameter CP3 No. 8465-M
CANISTER TYPE FILTER
Gray Outer Shell of High Density Paper with Dot-Dash Perforation.
6-7/16" diameter CP3 No. 6665-MR
No. 26 Gauge Tin Plate End Cap
No. 12 Gauge Steel Reinforcing Spring
No. 24 Gauge Tin Plate Retainer Shell
BUNA "N" Gasket Bottom
No. 24 Gauge Steel Retainer Ring

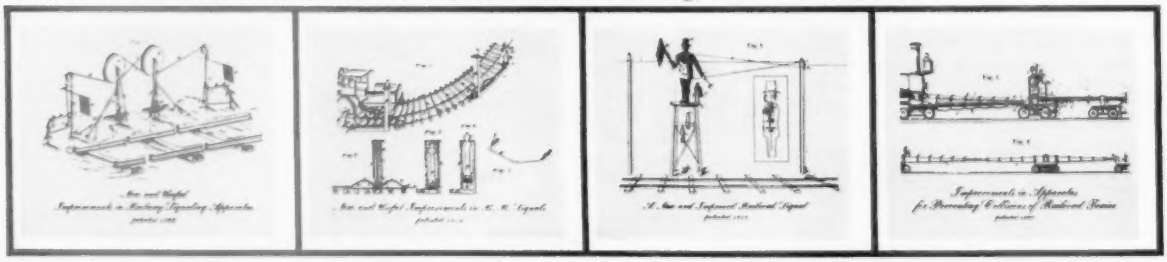
COMPLETE LINE OF DIESEL FILTERS	
Roving Type	Fuel Oil
Sock Type	Fuel and Lube Oil for use with or without Canister
Pleated Paper Type	Lube Oil for use with or without Canister

SUPERIOR DIESEL FILTER CO.
Originators of Original Sock Type Filter
200 SO. MICHIGAN AVE., CHICAGO 4, ILLINOIS
Representatives in All Principal Cities



This ingenious signal might have been good enough for 1879, but today's railroads require modern signaling systems which in turn depend on top-quality rail bonds. USS TIGERWELD Rail Bonds are reliable because we key every manufacturing step to give you strong, long-lasting bonds.

There's a USS TIGERWELD Signal Bond for every type of service and every installation method. Weld them, apply them mechanically, or use the new exothermic welded method. If you would like a complete set of 11" x 14" prints of these early signaling devices suitable for framing, write on your company letterhead to American Steel and Wire, Dept. 1482, Rockefeller Building, Cleveland 13, Ohio.



USS and Tigerweld are registered trademarks

American Steel and Wire Division of United States Steel

Columbia-Geneva Steel Division, San Francisco, Pacific Coast Distributors
Tennessee Coal & Iron Division, Fairfield, Ala., Southern Distributors
United States Steel Export Company, Distributors Abroad

ACME VISIBLE ROTARIES save hours, improve service on three railroads. Wherever railroad records must be referred to fast and frequently, Acme Visible Rotaries help keep your operating ratio down. Records rotate to users at a finger's touch. Result: more speed, better service, fewer costly, fatigue-caused errors. Send coupon today.

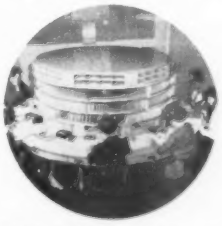
ACME VISIBLE

ACME VISIBLE RECORDS, Inc.
8712 West Allview Drive
Crozet, Va.

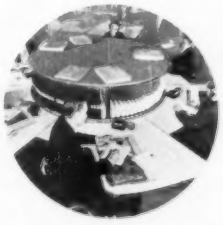
Please give me complete information describing many types and uses of power and manual Rotaries.

Name _____ Title _____
Company _____
Address _____
City _____ Zone _____ State _____

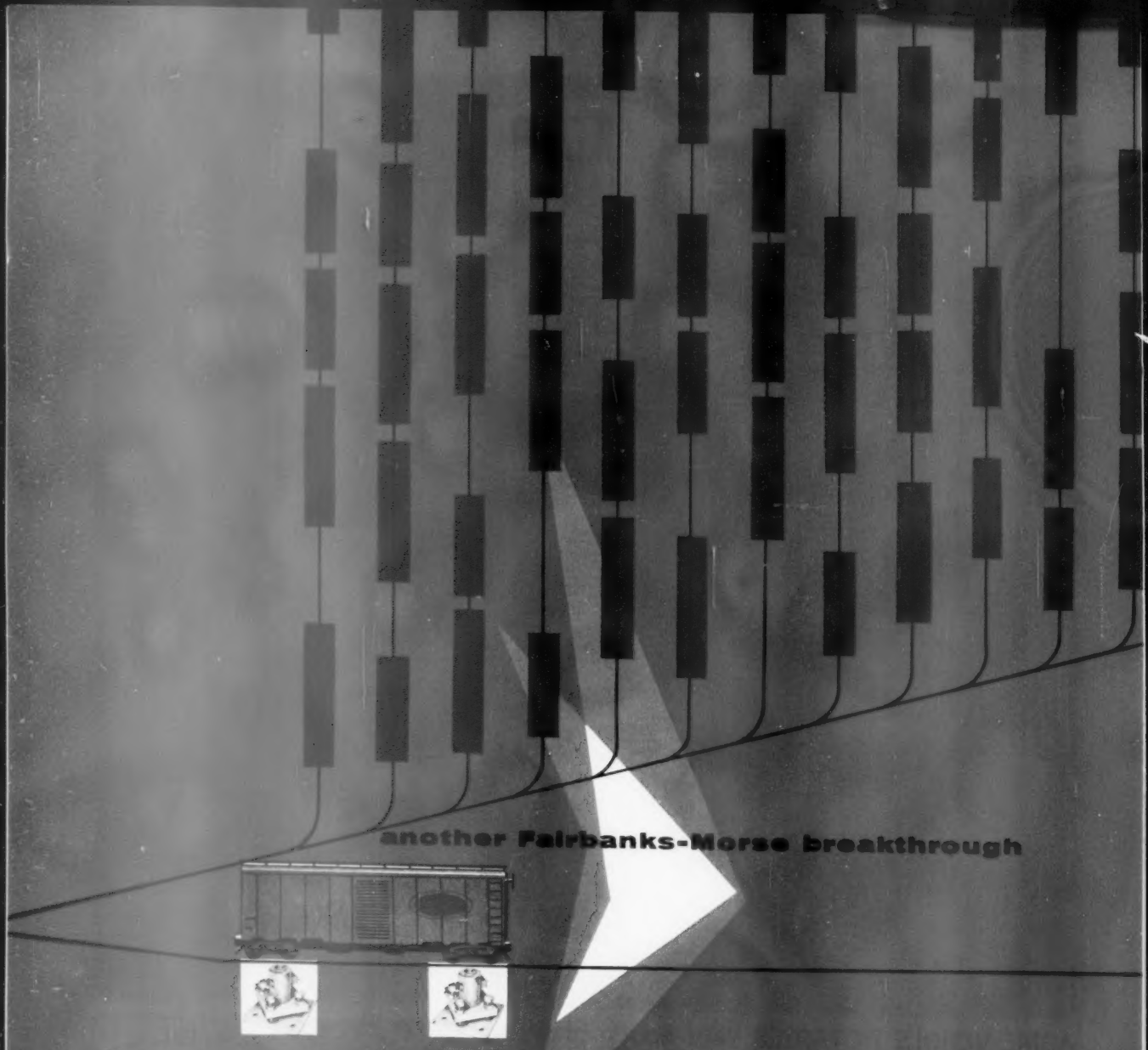
Instant tracing of all cars on The Milwaukee Road's 10,600 miles is centralized in Acme "Car Scope."



Quick ticketing that pleases travelers on Illinois Central results from Acme Visible reservations "hub."



Fast dispatching of carload shipments is done by the Chicago North Western's centralized "Car-Fax."



another Fairbanks-Morse breakthrough

WEIGHING-IN-MOTION

Now—through the genius of electronics, the true weight of moving railroad cars can be recorded—immediately! You can benefit by simpler, faster, far more economical weighing . . . without time-taking, costly, or classification delays.

Our electronic weighing-in-motion instrumentation permits specific data recording to ease traffic handling and promote greater efficiency. Car weights and other pertinent information can be recorded automatically. And, through electronic control, your weighhouse can be located remotely from the weighbridge. Result? You can group your processing operations for peak efficiency, economical handling, greater profit! (Even greater profit is possible with direct read-out to data processing equipment.)

Fairbanks-Morse electronic weighing-in-motion systems are now used in many areas. (The ore and coal industries, for example.) They prove their performance and profitability, every day. They can prove the same to you.

Write To: J. S. Peterson, Sales Manager, Electronic Weighing Department.

FAIRBANKS MORSE
A MAJOR INDUSTRIAL COMPONENT OF
FAIRBANKS WHITNEY
ELECTRONICS DIVISION
100 ELECTRA LANE, EAST STATION, YONKERS, NEW YORK
NEW DIMENSIONS IN ELECTRONIC DEVICES

Current Publications

NEW BOOKS

DIRECTORY OF RAILWAY OFFICIALS AND YEAR BOOK, 1961-1962, compiled from official sources under the direction of the editor of the Railway Gazette. 656 pages. Tothill Press Limited, 33 Tothill St., Westminster, S.W. 1, London. 60 shillings (approximately $8.40).

The ever changing pattern of the world of railways is clearly shown by the number of important changes and additions appearing in this edition. Political evolution on the African continent is responsible for the disappearance of long-familiar headings and the emergence of new ones. French Equatorial Africa and French West Africa have been replaced by Congo (formerly Middle Congo), Dahomey and Ivory Coast. The Federation of Mali has been dissolved, and the Mali Railway now consists only of those lines in the former French Soudan, the rest of the system has become the Senegal Railways. In Pakistan the two government railways have been renamed, and mergers in the United States have caused the removal of some well-known names. All the useful data appearing in previous editions—the directory of railways and officials; suppliers of locomotives and rolling stock; statistics, etc.—have been retained, and brought up to date wherever possible.

'93/'41 THUNDER LAKE NARROW GAUGE, by Harvey Huston. 145 pages, illustrations. Published by Mr. Huston, 860 Mount Pleasant St., Winnetka, Ill., in a limited edition as a collector's item. $7.50.

CANALS AND AMERICAN ECONOMIC DEVELOPMENT, by Carter Goodrich and others. 303 pages. Columbia University Press, 2960 Broadway, New York 27. $7.50.

MR. PULLMAN'S ELEGANT PALACE CAR, by Lucius Beebe. 575 pages, illustrations. Doubleday & Company, Inc., 575 Madison Ave., New York 22. $17.50.

FROM THE MANUFACTURERS

BULLETIN AD-410. "Do-it-yourself" ideas on framing of storage racks, shipping containers and similar structures. 24 pages. Acme Steel Co., Fabricated Materials division, 135th St. & Perry Ave., Chicago 27.

BULLETIN U1-19. A case history report on selective assembly and steel strapping of lumber packages. Acme Steel Co., Acme Steel Products division, 135th St. & Perry Ave., Chicago 27.

SELF-CONTAINED WAREHOUSE SCALES. Describes scales for shipping, receiving, freight and baggage rooms. Bulletin 8003, C. G. Gehringer, director of marketing, Scale division, Fairbanks, Morse & Co., 100 Electra Lane, Yonkers, N.Y.

GENERAL

EFFECTS OF STATE AND LOCAL REGULATIONS ON INTERSTATE MOVEMENT OF AGRICULTURAL PRODUCTS BY HIGHWAY. Marketing Research Report No. 496, U.S. Department of Agriculture, Agricultural Marketing Service, Transportation & Facilities Research Division. 101 pages. Available from Supt. of Documents, U.S. Govt. Printing Office, Washington 25, D.C. 55 cents.

Mountains of packages

. . . yet she can sort them all in an hour with one hand

There are 3,600 packages in that stack — all sizes, all shapes. They might be earmarked for hundreds of different destinations. Big sorting job, by ordinary methods, but it's just an easy hour's work for a QIK-TIP Sortation System.

With the aid of electronic memory devices, tilting trays gently slide their coded contents off at a pre-determined station. Users report that the QIK-TIP system has quickly repaid its initial cost through increased productivity and accuracy.

The QIK-TIP sorter is ideally suited for transfer terminals, parts depots, mail order warehouses and many manufacturing operations. Speaker Sortation Systems, Inc. is thoroughly experienced in the layout of complete systems. Each is tailored to your specific order processing and material handling requirements.

Write for *free literature* describing the QIK-TIP sorter and its applications. Let our application engineer analyze your present sorting method.

Specialists in terminal modernization.

SPEAKER SORTATION SYSTEMS, INC.

3250 NORTH 126th STREET, BROOKFIELD (MILWAUKEE, WIS.)

SALES OFFICES

New York, Washington, Detroit, Chicago, Los Angeles, Milwaukee

Are we too early to wish you a Merry Christmas?

Perhaps. But when we learned about the timely and provocative December 4th issue of Railway Age devoted to the survival of our country and the importance of the railroads to our survival, we felt the need to align ourselves with this issue.

This is why we felt justified in advancing the time of our traditional Christmas greeting and why we say now instead of later,

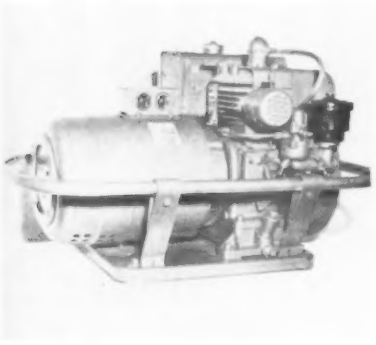
"Merry Christmas to us all...
God bless us.
God bless us, every one"

YOUNGSTOWN STEEL DOOR COMPANY

CAMEL SALES COMPANY • CAMEL COMPANY LIMITED

Cleveland • Chicago • New York • Youngstown

NEW PRODUCTS REPORT



Portable Generator

A new series of portable engine-generators is available in sizes of 1,000, 2,000, 3,000 and 4,000 watts AC. These sizes are rated at 3,600 rpm, but an 1,800-rpm series is available starting at 750 watts AC. Features include a pull starter, protective carrying frame, rubber mounts and handy receptacles with optional wheel dollies and housing. Electric, remote, demand starting and automatic transfer arrangements can be obtained. *Katolight Corp.*

Loudspeaker Phone

Amplifone is a cordless, self-powered, transistorized telephone holder, and amplifier. Placing the telephone handset in the unit enables the user to carry on telephone conversations with his hands free. A volume control knob regulates the loudness of voice. The phone can be talked into from a distance up to 10-12 ft when using the Amplifone unit. Four flashlight batteries provide up to 500 hours use. *Bell Industries of California.*

VOM Meter

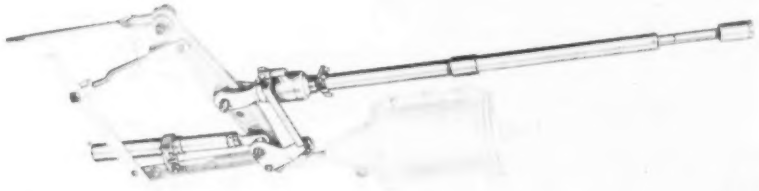
A new volt-ohm-milliammeter has a 7-in. meter and a single switch for both range and function. Sensitivity for model 268 is 5,000 ohms per volt AC and 20,000 ohms per volt DC.

Frequency response is 5 to 500,000 cps, ± 2 db. Dbm ranges from — 20 to + 50 dbm for one milliwatt in 600 ohms.

AC and DC voltage ranges are: 0-1,200; DC microamps 0-60; DC milliamps 0-120. *Simpson Electric Co.*

Citizen Band Radio

Two new all-transistor pocket-size citizen band radio transceivers, Ray-ette and Ray-ette Super, measure 5½ in. by 2¾ in. by 1 3/16 in. and weigh less than 15 oz. When the 46-in. telescoping antenna is retracted, an interlock assures the set is off. An earphone attachment permits private communications. Two-way communications up to two miles can be obtained with the 100-milliwatt units. They are powered by rechargeable batteries. *Raytheon Co.*



Brake Regulator

The Ajax-FFA double-acting automatic brake regulator features instantaneous let-out to predetermined piston travel on first brake application, adjusts slack either way on application of air brake and while there is no load on regulator. A positive locking device secures regulator after each piston travel correction. It is said to be shockproof and not affected by car dumping operations. *Ajax Consolidated Company.*

Wire Markers

A new self-adhering, self-laminating coded marker has a transparent extension. When applying a coded marker around a wire, the remaining clear portion wraps around itself, causing it to laminate permanently over the coded area, thus protecting the legend. This system permits more permanent legibility to the underlying printed vinyl film, and makes it easy to wipe away surface dirt, allowing the codes to appear clean and visible. *Westline Products.*

The railroads asked for

RESERVE CAPACITY

A.A.R. CERTIFICATE NO. 41

- CUSHION SHOCKS
- CUT COSTLY DAMAGE CLAIMS
- PROTECT VALUABLE LADINGS
- REDUCE MAINTENANCE COSTS

Cardwell Westinghouse is FIRST to meet the new A.A.R. specification!

Continually, Cardwell Westinghouse is working for the railroads to help reduce damage claims and maintenance costs.

Latest development: Westinghouse-type MARK 50 Friction Draft Gear was the FIRST to meet A.A.R. Specification M-901E-59. A.A.R. wanted a high capacity, low reaction gear for 24 5/8-inch pockets—asked for a Minimum Capacity of 36,000 foot-pounds at 500,000 pound Reaction Force Level. MARK 50 came through with 38,940 foot-pounds! Furthermore...at Maximum Travel (800,000 pound Reaction Force Level), after sturdiness test, this remarkable new MARK 50 had an average capacity of 51,760 foot-pounds! MARK 50 has 3¼-inch travel.

Let this high capacity cushion and protect *your* cars and valuable ladings against high-energy impacts. Specify MARK 50!

WESTINGHOUSE

MARK 50

FRICTION DRAFT GEAR FOR STANDARD 24 5/8-INCH POCKETS

CARDWELL WESTINGHOUSE Company

332 S. Michigan Ave., Chicago 4, Illinois Canadian Cardwell Co., Ltd., Montreal 2, Quebec

AIEE Winter Meeting Includes 12 RR Papers

Rapid transit, electrification and calculating freight train performance by digital computers will be among the featured papers of the Land Transportation Committee presentations at the winter general meeting of the American Institute of Electrical Engineers to be held Jan. 28-Feb. 2, 1962, at the Statler-Hilton Hotel in New York City.

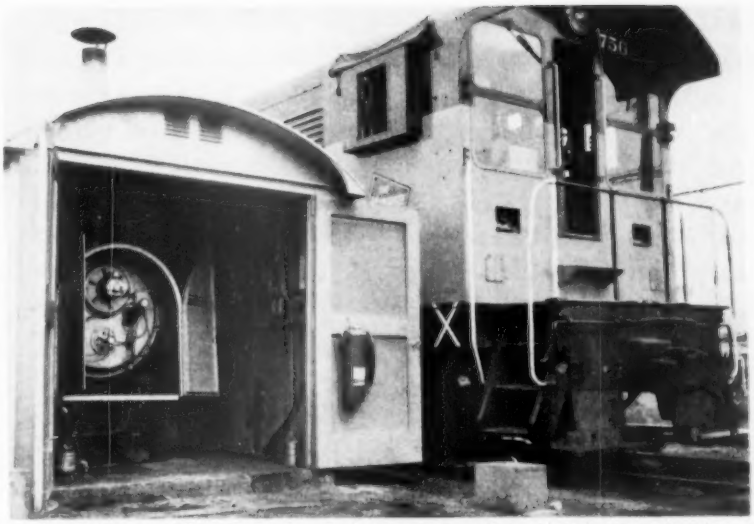
Railroad papers scheduled for Thursday, Feb. 1, include Interdependent Relationship of Operating Practices, Motive Power and Climate on Traction Motor Brush Performance by K. R. Matz, National Carbon Co.; Functional Evaluation Test Procedure for Traction Field Coils by Tor Orbeck, Westinghouse Electric Corp.; Operating Experience with Epoxy Insulation by W. E. Kelley and J. J. Kuscharsey, Pennsylvania; Automatic Safety and Vigilance Control System for Railroad Locomotives and Motor Coaches by B. Steiner, Oerlikon Engineering Co.; Aids for Calculating Freight Train Performance by Digital Computers by J. E. Hogan, Pennsylvania; and Rectifier-type Locomotive for PRR by D. R. McLeod, General Electric Co. and J. W. Horine, Pennsylvania.

Friday's program, Feb. 2, includes these papers: Electrification—Devil or Angel by L. B. Curtis, Pennsylvania; New Design of Current Collection Pantograph by A. Scheidecker, Establissement L. Faiveley; Trends in European Pantograph Design by G. Moehring, August Stemmann OHG, and J. Schwalm, Ringsdorff Werke; Winter Aspects of Electric Railroad Operation by P. H. Hatch and R. P. Turnbull, Long Island; Equipment for Rapid Transit by W. C. Wheeler, St. Louis Car Co.; and Rapid Transit Signaling and Automatic Train Control by C. A. Butts, Chicago Transit Authority.

Transportation Management Program Set for February

The seventh annual Transportation Management program, sponsored by the Graduate School of Business of Columbia University, will be held at Arden House, Harriman, N. Y., Feb. 4-9, 1962. The program will be under the direction of Prof. Ernest W. Williams, Jr.

Among the speakers will be Anthony F. Arpaia, vice president-international services, REA Express, Inc.; Arthur Arsham, transportation attorney and lecturer; A. E. Baylis, vice president, Freight Sales and Service, New York Central, and Donald J. Bowersox, assistant director—Business Development, REA Express, Inc.



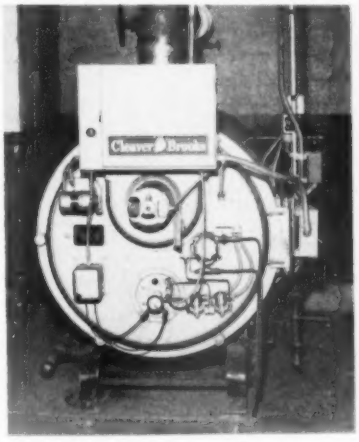
This 20-horsepower Cleaver-Brooks steam boiler is mounted on wheels and can be relocated easily.

MOBILE STEAM cuts diesel costs

Efficient Cleaver-Brooks boilers produce low-cost steam where needed to help the Chicago, Milwaukee, St. Paul and Pacific reduce diesel fuel and maintenance costs.

Throughout the area served by the Milwaukee Road, winters can be bitter cold. To prevent freeze-ups, diesel switching locomotives had to be kept running all night. Fuel costs mounted. Maintenance costs were unreasonably high.

Milwaukee Road called on Cleaver-Brooks to offer relief for this costly situation. One boiler was removed to the switching area where diesels coming alongside are fed steam from the boiler to keep the engine cooling water warm. This avoids freeze-ups and assures quick starts for the diesels every morning. The other — a stationary boiler — heats office and warehouse.



In the States of Washington, Montana, Idaho, South Dakota, Iowa, Minnesota, Illinois and Wisconsin all along the Milwaukee Road in 23 cities — Cleaver-Brooks is helping do a job that is important to ALL railroads — lower operating costs.

For flexibility, these boilers can be mounted on wheels so they can be towed to other locations and used for other applications during summer months.

Milwaukee Road in Milwaukee, uses a model CBH 25 horsepower Cleaver-Brooks boiler for heating their Fowler Street warehouse and office. Mr. Otto Keppner, foreman, who maintains and checks the boiler, says: "After the problems we had with our previous boiler, the CBH is a real pleasure to operate. I'd estimate that our fuel consumption is about half what it was."

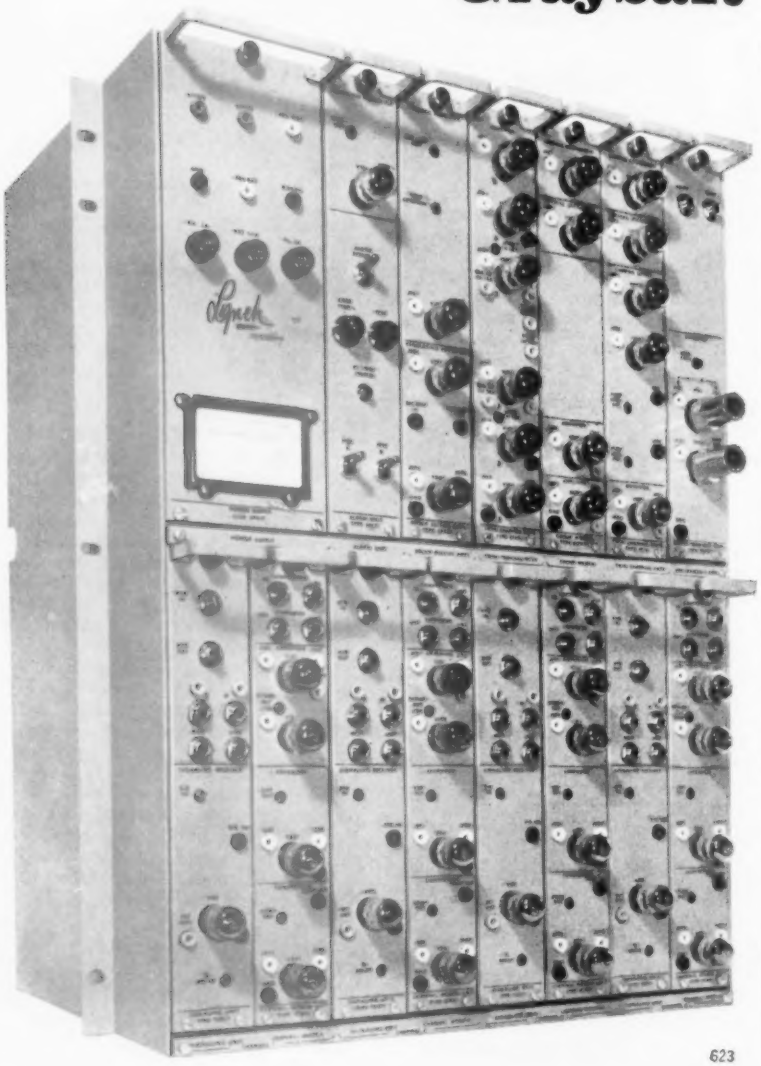
Cleaver-Brooks packaged boilers are designed for high efficiency performance. They are installed and started by factory-trained specialists. Exclusive features, found only in Cleaver-Brooks boilers, assure you of greater efficiency, more dependable performance than any other boiler. For full information, contact your Cleaver-Brooks agent, or write Cleaver-Brooks Company, Dept. M, 382 E. Keefe Avenue, Milwaukee 12, Wis.

Cleaver Brooks®

ORIGINATOR AND LARGEST PRODUCER OF PACKAGED BOILERS

call Graybar for speech-plus-telegraph with new Lynch B-500. With new Lynch B-500, you operate up to 3 high-speed (100 wpm) telegraph channels, plus voice and signaling on each voice channel. ■ It is easy to install, flexible, and features automatic regulation. Its wide band, synchronized channels are ideal for most types of data transmission, and it coordinates with Western Electric "C" and "O" carrier allocations. ■ Details are in Bulletin B-500. For this, or information on any communications equipment, call your nearby Graybar office. It's another reason to call Graybar for everything electrical. Graybar Electric Company, Inc., 420 Lexington Ave., New York 17, N. Y.

GraybaR



623

Letters from Readers

Saving Passenger Service

Midwest

To the Editor

Your Sept. 11 [p. 16] editorial, "Alms or Restitution," regarding the ICC's proposed passenger service subsidy, may have overlooked the main point in the passenger transportation crisis.

The issue facing all levels of government is not whether restitution should be made for past ill treatment of railroad passenger service, or whether alms should be handed out temporarily to preserve a poor relation. The real issue is whether we will have operation of intercity common carrier passenger service by private enterprise or by government.

It should be obvious by this time that governmental forced feeding of the airline industry has destroyed much intercity rail passenger service. It is equally apparent that it has created an airline industry which requires increasing governmental aid just to sustain it; and which faces a deepening financial crisis caused by artificially induced over-expansion. The airline industry is a house built on the sand of government subsidy. Government must arrive at a national policy which will put the airline industry on a sound economic foundation. This in turn would produce a natural economic environment, making possible the development and expansion of rail service in many areas where trains can effectively compete.

Without such a policy the eventual disappearance of most intercity rail service is sure. Equally sure is the prospect that the loss of rail service will impel government to try to fill the vacuum with air service even less economically feasible than much of today's air service. There is obviously no room for free enterprise in such a situation. The end result can only be government operation of air service or rail service, or both, and at prohibitive cost to the public.

It can be fairly said that today's rail passenger problem has been caused by unfair government treatment so that restitution would be appropriate. It can also be said fairly, by government and railroad labor, that a partial cause has been a negative approach by freight-minded rail managements. But saying either of these things does little more than look backward. Once it is understood how the present dreary situation came about, what is needed is to concentrate on suggesting urgently needed solutions.

Those who are interested in railroads can help government arrive at the right

policy by doing just that and by emphasizing the future dangers inherent in continuing past policies. Rail managements can help government arrive at the right policy by statements and actions which let government know that abandonment of passenger service is not what the carriers desire, and that they are interested in developing it. . . .

Both the industry and the country would benefit if more initiative were taken to demonstrate both the value of rail passenger service and the will to sustain it. Such initiative could well replace what seems to outsiders little more than sulking about unfair treatment.

There are intercity rail passenger services that are profitable, or very close to it. Yet management seems willing to do little to make the most of them through improvements in service and competitive marketing. Even though the causes for the lethargy may be understandable within the railroad industry, they are not understandable to the public and to government. Government naturally won't formulate policy that will encourage development of an industry whose managers show little sign of wanting to develop it. Therefore, government is unlikely to arrive at the "right policy" unless railroads begin to apply interest and vigor to those services which might profitably be developed right now. At the very least, such a new approach by railroad management could give a positive passenger service side to the industry's public posture, as piggyback has given it for freight service.

Railway Passenger Manager

[We agree with the constructive suggestions of this passenger officer. President Kennedy has just had a "task force" report to him on ways and means to advance the interests of air transportation. Why should he not assign a similar "task force" to report on ways and means to preserve and develop railroad passenger service, where the public interest requires it, and to preserve the service in private ownership?—*Editor*]

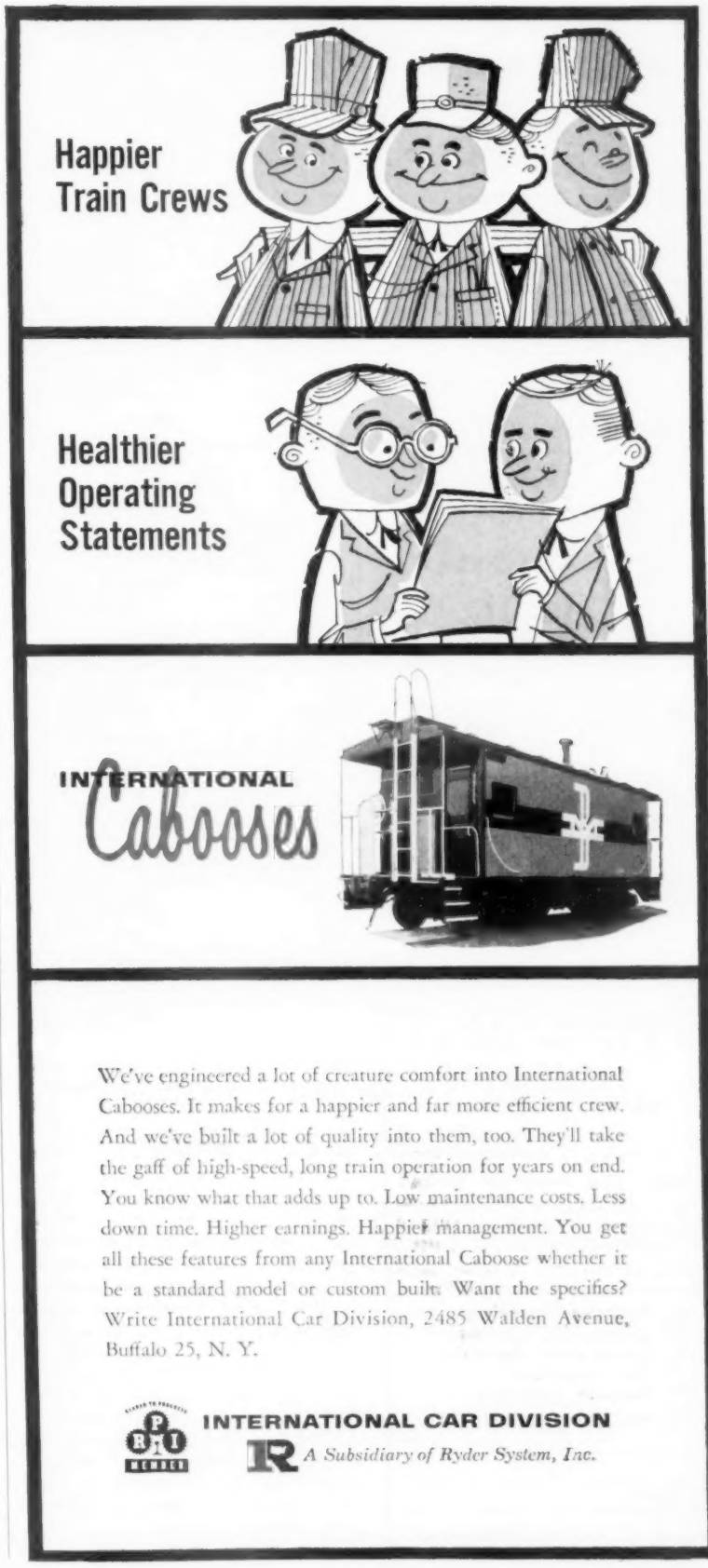
Seaboard Piggyback

Richmond, Va.

To the Editor:

I want you to know how much I appreciate the fine article in the Sept. 25 issue of Railway Age covering "Seaboard's growing piggyback service." We have had many favorable comments from some of our most important shippers and receivers, all of which I am certain will greatly enhance our opportunities to fully develop and expand our TOFC service.

Howard P. Toxey
General Freight Traffic Manager
Seaboard Air Line


Happier
Train Crews
Healthier
Operating
Statements
INTERNATIONAL
Cabooses
We've engineered a lot of creature comfort into International Cabooses. It makes for a happier and far more efficient crew. And we've built a lot of quality into them, too. They'll take the gaff of high-speed, long train operation for years on end. You know what that adds up to. Low maintenance costs. Less down time. Higher earnings. Happier management. You get all these features from any International Caboose whether it be a standard model or custom built. Want the specifics? Write International Car Division, 2485 Walden Avenue, Buffalo 25, N. Y.
INTERNATIONAL CAR DIVISION
A Subsidiary of Ryder System, Inc.

FREE PARKING

for transient guests

Overlooking Lake Michigan and Belmont Yacht Harbor. 12 minutes from the loop—direct busses at the door.

Charming, new Mansion House Dining Room and unique Cocktail Room—The Dam Site.

Banquet and Meeting rooms accommodate up to 400 persons.

700 Rooms & Suites
TRANSIENT & PERMANENT
Full Hotel Services
Singles from $9.50
Doubles from $14

P. J. PETITMAIRE
General Manager

Belmont Hotel

BITTERSWEET 8-2100
Teletype CG 1-4384
3172 NORTH SHERIDAN ROAD
CHICAGO

Alpert Calls Subsidy Only 'Out'

A subsidy for the New Haven's passenger operations "is the only alternative to liquidation or government ownership—and would be cheaper than either," George Alpert told the New York Society of Security Analysts on Nov. 24.

Mr. Alpert, emphasizing that he is "still president of, but not a spokesman for," the bankrupt railroad, said abandonment of its passenger services "is not the solution. Those services are a public convenience and necessity. Their abandonment is impossible.

"Compensatory fares are equally impossible, simply because the public won't pay them."

On the other hand, he pointed out, passengers by every other form of transportation get the benefit of subsidy. Federal, state and local governments have spent some $77 billion, over and above highway user taxes, on road construction. Air passengers are helped by past or present cash subsidies to airlines, and by government spending on airport construction, flight and weather control and information systems and aircraft development programs. Even local transit riders are subsidized when, as in New York, cities pay for new cars and other capital costs.

"Why," he asked, "shouldn't railroad passengers get the same benefit?

"There does," Mr. Alpert conceded, "seem to be a growing appreciation of the problem. But progress is slow. Congress must stop haggling over whether the responsibility lies in Washington or in the localities served. "The question" he insisted, "is national."

Speaking more broadly, Mr. Alpert said the New Haven's difficulties are grounded in the troubles of the entire railroad industry, "which are many."

In addition, the NH has "its own inherent built-in problems." In fact, he said, "if you listed all the problems of all Class I railroads, you would find everyone of them on the NH."

Ultimately, he said in response to a question, the NH and other New England railroads "may have to be included in some general eastern merger plan." He refused, however, to express any opinion as to how long the railroad might remain in reorganization.

"We're working on a plan, but the problem is to get the road reorganized before all its assets are used up by the certificates which the trustees have to issue."

He indicated, however, that the key to reorganization lies in the passenger deficit problem, and cannot be accomplished until that is solved. Fixed charges, scaled down in an earlier bankruptcy, can't be cut much more, because many of them are equipment trusts, "which can't be cut." And "there is no current operating income out of which even reduced charges could be paid."

Industry Shift Aids Tidewater

The current trend of development in the expanding South suggests that future growth will be heaviest in the tidewater regions. That is the opinion of Atlantic Coast Line President W. T. Rice.

"We feel," Mr. Rice told the New York Society of Security Analysts Nov. 27, "that industry is going to come east from the piedmont to the tidewater." That is why, Mr. Rice said, the Coast Line industrial development program is "one of the most important things we have on this property. We've bought literally hundreds of acres of high priced property . . . for no reason other than to have it available—not taken up by low-price housing—when some big manufacturer wants to move in." And the manufacturers are moving in, Mr. Rice said. He cited as examples National Gypsum's new $6-million facility on ACL territory in Tampa and a new power plant on the Coast Line in South Carolina.

Piggyback is another important development in the Southeast, Mr. Rice said. On the Coast Line, after piggyback service was begun in 1959, the business grew to a gross of $1,819,000 in 1960. This year, it will be over $2,500,000, Mr. Rice said.

An important benefit of piggyback service, Mr. Rice noted, is that, with it, the railroads are getting an increasing proportion of return loads, both to the North and to the West. This is, he said, "a much better movement than we enjoyed with the refrigerator cars, which moved empty a good deal of the time."

Piggyback, he added, offers the best hope of meeting the competition resulting from the expanding Interstate Highway System. "If we can merge railroads and do away with wasteful competition," he said, "we can establish a rate that will put us in competition with the highways, in my opinion."

Mr. Rice also pointed out that ACL believes in passenger service and is spending "a lot of money" on passenger equipment and new stations.

FIRST CLASS TICKET TO A BETTER JOB AND . . . MORE MONEY!

LEARN SUPERVISION

by proven home study methods at low cost from a 48-year old institution.

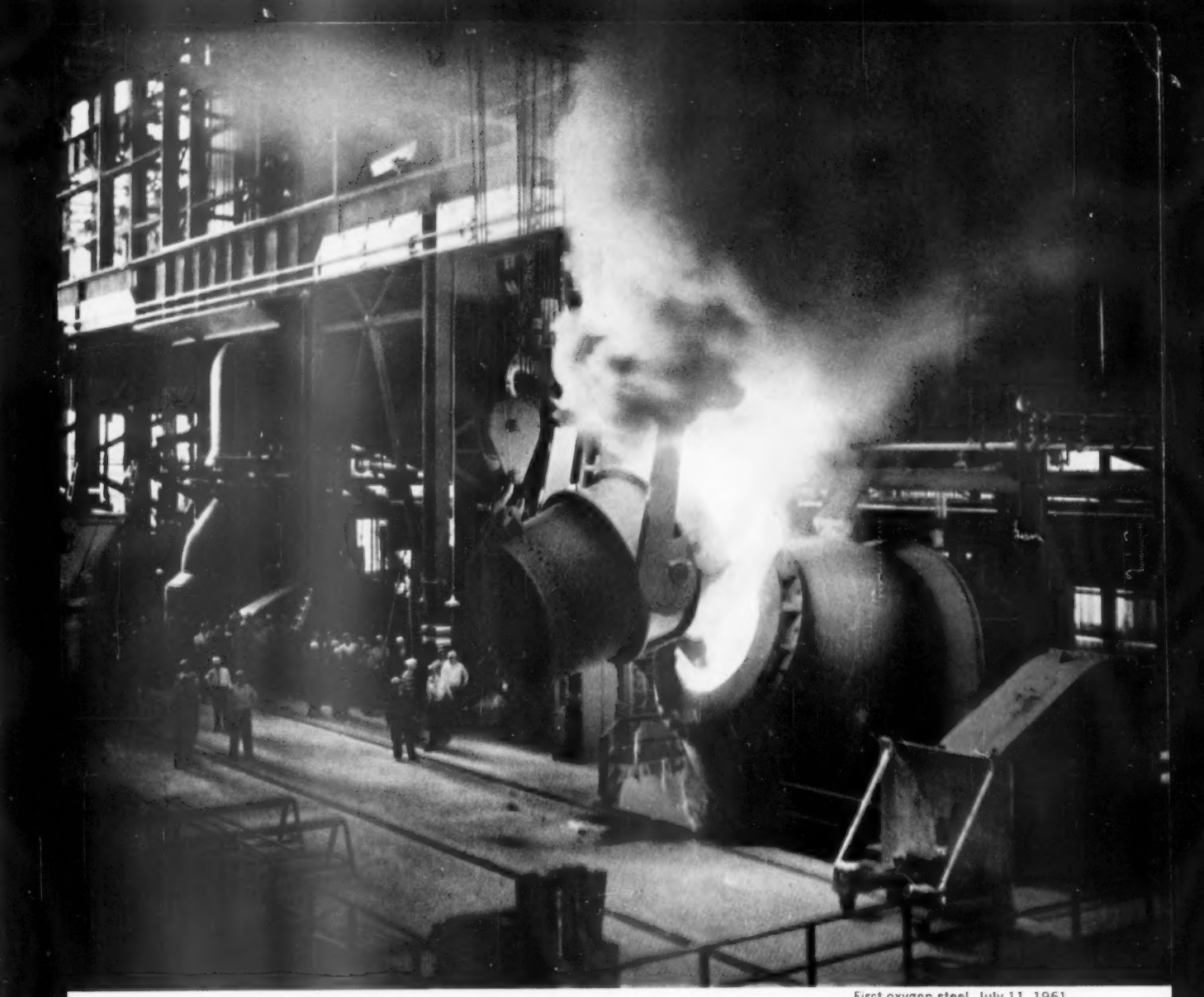
SEND THIS COUPON TODAY

THE RAILWAY EDUCATIONAL BUREAU
1809 CAPITOL AVENUE, OMAHA 2, NEBR.

Send me full information and a free sample lesson for the course I have checked below.

- ☐ Railway Supervision
- ☐ Locomotive Electrician
- ☐ Locomotive Machinist
- ☐ Car Inspector
- ☐ Railway Signaling
- ☐ Other

Name
RR Job
Address
City Zone State



First oxygen steel, July 11, 1961

New oxygen steel plant--another milestone in CF&I's "Operation Progress"

"Operation Progress" means just that at CF&I—a planned program of technological advance designed to modernize the art of steel-making.

Example: Installation of a new Basic Oxygen Steel Plant at Pueblo capable of producing approximately 100 tons of molten steel every hour. CF&I is among the first U. S. companies to adopt the oxygen process—first major breakthrough in steel-making since the design of the open hearth furnace. And this is the first plant of its type to be built in the Rocky Mountain area.

CF&I President A. F. Franz sums it up this way: "The new operation is only one of the major steps in the modernization program CF&I has undertaken during the past few years to bolster our competitive position with both domestic and foreign steel producers."

In short, "Operation Progress" is dedicated to serving you even better with the quality products you have come to expect from CF&I. 8506

Steel

The Colorado Fuel and Iron Corporation

Denver • Oakland • New York

Sales Offices in Key Cities

CF&I STEEL MADE IN U.S.A.

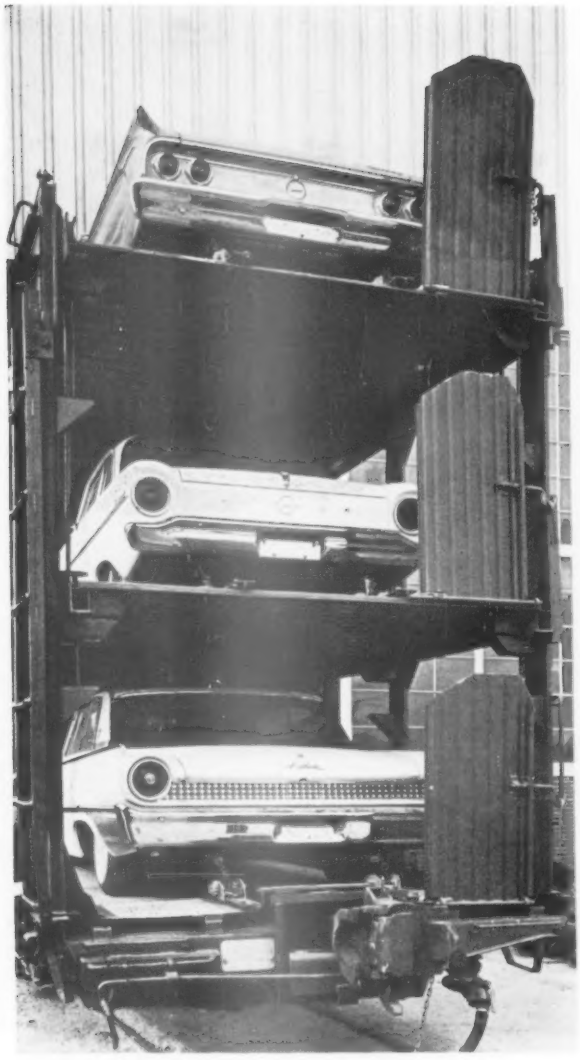
Clearance Problems?

PARAGON HAS A SOLUTION FOR AUTOMOBILE SHIPPING

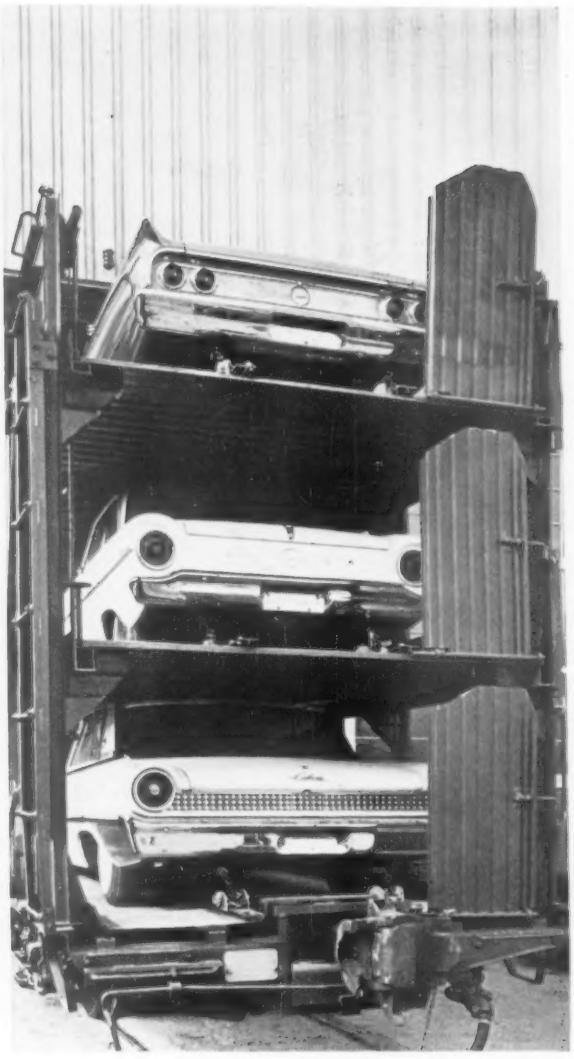
The Paragon Lo-Hi-Tri Rack

EFFICIENCY +

1. CARRIES 15 AUTOMOBILES.
2. 16′ 8″ OR LESS FROM TOP OF RAIL WHEN LOADED, WITH DECKS LOWERED FOR TRAVEL, COMPARABLE TO MOST BI-LEVELS.
3. COMPATIBLE WITH STANDARD TRI-LEVELS FOR LOADING & UNLOADING.
4. POWER TO MOVE DECKS UP AND DOWN TRANSMITTED THROUGH WINCH AND CABLE MECHANISMS.
5. WINCHES OPERATED BY PORTABLE MOTORS, EITHER AIR OR ELECTRIC. IF MOTORS NOT AVAILABLE CAN BE OPERATED BY HAND.
6. MOUNTED ON 89-1 LO-DEK CAR, EQUIPPED WITH 4 BUFFER ASSEMBLIES, 60 TIEDOWN ASSEMBLIES.



Decks Raised
For Loading & Unloading

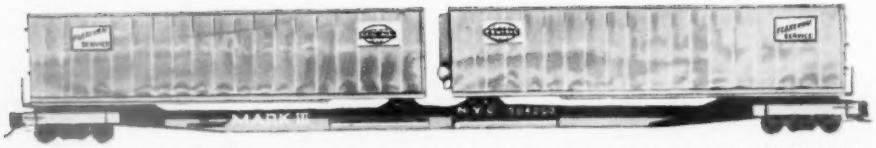


Decks Lowered
For Traveling

STEEL Insures Strength and Security

For Further Information Contact:

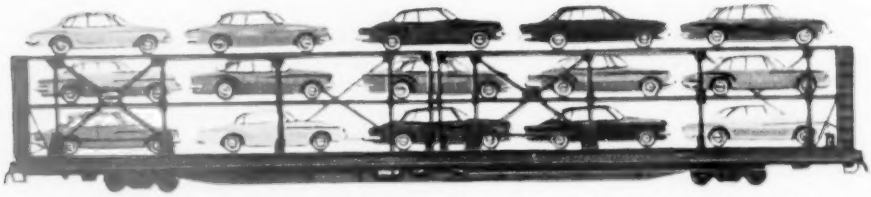
PARAGON
BRIDGE & STEEL CO.
44000 GRAND RIVER, NOVI, MICH.
MAILING ADDRESS
P. O. BOX NO. 4816 – REDFORD STATION
DETROIT 19, MICHIGAN
TELEPHONE WO. 3-3515



New star of the Central's fleet. Flexi-Van cars carry containers that carry everything—door-to-door—by rail, road or sea.

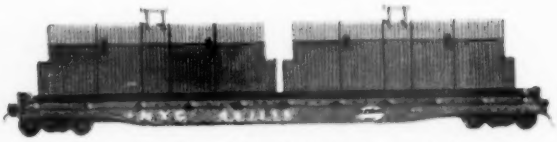
This versatile workhorse may be fitted with racks, air pillows or movable bulkheads for a wide variety of products.

Some covered hopper cars tote food—such as flour, sugar or corn grits. Others carry cargoes such as cement or bauxite.



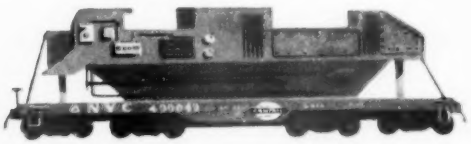
Fast, low cost transportation for automobiles. New models drive right on—and off—these special rack cars.

Prefabricated houses—complete with plumbing and wiring—ride swiftly and safely on the Central.



Some cars are fitted with skids and hoods to protect coiled sheet steel enroute to auto body makers.

Depressed center cars carry high loads under low bridges. Used for giant transformers and other giraffe-type cargoes.



Meet the Central's heavyweight champion. This rugged specimen can carry a staggering 250 tons!

From teacups to 250-ton transformers... there's a Central car to carry anything you ship

In the last five years the Central's fleet of "special" cars has expanded more than 150%!

With cars custom made to fit their freight, Central shippers rack up big savings on crating, packing and dunnage as well as loading and unloading time. And so can you!

Shipments move faster on the Central, too. *In the last four years, Central freight train speeds have doubled!* And electronic classification yards have cut car sorting time from more than 24 hours to less than four.

If you don't specify shipment via the New York Central, you may be missing out on important savings. Why not call your local New York Central freight representative for further details?

NEW YORK CENTRAL SYSTEM

ROAD TO THE FUTURE

Market Outlook

Carloadings Drop 16.2% During Holiday Week

Loadings of revenue freight in the holiday week ended Nov. 25 totaled 495,089 cars, the Association of American Railroads announced on Nov. 30. This was a decrease of 95,553 cars, or 16.2%, compared with the previous week; an increase of 23,738 cars, or 5.0%, compared with the corresponding week last year; and a decrease of 79,140 cars, or 13.8%, compared with the equivalent 1959 week.

Loadings of revenue freight for the week ended Nov. 18 totaled 590,642 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Nov. 18

District	1961	1960	1959
Eastern	85,963	82,554	90,832
Allegheny	98,194	93,965	114,673
Pocahontas	55,694	46,568	53,536
Southern	109,700	111,954	121,317
Northwestern	78,539	62,677	78,885
Central Western	123,910	128,161	128,850
Southwestern	38,642	41,682	41,802
Total Western Districts	241,091	232,520	249,537
Total All Roads	590,642	567,561	629,895
Commodities:			
Grain and grain products	56,438	67,956	53,785
Livestock	5,147	6,072	7,035
Coal	113,434	102,398	124,532
Coke	7,896	5,867	8,277
Forest Products	37,177	34,629	40,484
Ore	38,607	20,448	42,370
Merchandise l.c.l.	26,164	32,780	39,588
Miscellaneous	305,779	297,411	313,824
Nov. 18	590,642	567,561	629,895
Nov. 11	605,057	564,595	638,333
Nov. 4	619,413	599,555	561,223
Oct. 28	647,549	620,807	587,776
Oct. 21	650,775	637,573	607,517
Cumulative total, 46 weeks	25,479,067	27,569,348	27,579,794

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Nov. 18 totaled 12,655 cars, compared with 11,174 for the corresponding 1960 week. Loadings for 1961 up to Nov. 18 totaled 523,657 cars, compared with 495,763 for the corresponding period of 1960.

IN CANADA.—Carloadings for the seven-day period ended Nov. 14 totaled 68,328 cars, compared with 69,421 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Nov. 14, 1961	68,328	23,280
Nov. 14, 1960	64,515	25,382
Cumulative Totals		
Nov. 14, 1961	3,061,712	1,064,744
Nov. 14, 1960	3,224,350	1,220,288

New Equipment

FREIGHT-TRAIN CARS

► *Western Pacific.*—Purchased the first ten tubular aluminum covered hopper cars designed and manufactured by ACF, with assistance from Kaiser Aluminum (RA, May 29, p. 16). The Center Flow cars, first of which was delivered Nov. 8, will be used by WP for shipments of bulk edible commodities.

PASSENGER-TRAIN CARS

► *Missouri Pacific.*—Will purchase approximately 50 new mail and express cars in 1962, according to President Downing B. Jenks. MP has also announced a major passenger-car rebuilding program. All of the road's passenger cars will be rebuilt at Sedalia, Mo., at the rate of 12 cars a month. (See page 123.)

► *New York City Transit Authority.*—Proposes to issue bonds to finance the purchase of 1,000 new subway cars at a cost of $125 million. A bill to authorize the bond issue is being filed in Albany in advance of the 1962 Legislature. A similar bill filed last year, contemplating a $200-million bond issue to finance acquisition of 1,800 new cars, died in committee because, legislative leaders said, there was not sufficient time to study it. (The proposed 1961 capital budget now before the Board of Estimate includes $61 million for purchase or modernization of 600 cars. If the bond issue is approved, this expenditure would be made a part of the $125-million program.)

FOREIGN

► *Vietnam.*—Requests bids by Jan. 10, 1962, for supplying 43 passenger and 21 freight cars for the Vietnam Railway System. Bid invitations are available from the Embassy of Vietnam, 2251 R St., N.W., Washington 8, D.C.

New Facilities

► *Virginia State Ports Authority.*—A bond issue totaling $27,500,000 to finance a long-range program of port development at Norfolk has been announced. The port program includes construction of a new $13,300,000 general-cargo pier at Lamberts Point, which after completion in 1963 will be leased to the Norfolk & Western for operation as a public shipping terminal.

Maintenance Expenditures

► *Down 1.5% in September.*—Expenditures by Class I roads for maintenance of equipment, way and structures in September were down about $3.6 million, compared with September 1960, according to report of AAR Bureau of Railway Economics summarized below:

	Sept. 1961	Sept. 1960	% Change
Maintenance of Way and Structures	$ 94,983,127	$ 97,395,182	−2.5
Maintenance of Equipment	139,485,923	140,665,351	−0.8
Totals	234,469,050	238,060,533	−1.5

Grade-Crossing Advisory Group

The chief of the ICC's Section of Motor Carrier Safety, Ernest G. Cox, has recommended creation of a government-industry advisory group to organize and direct a program for prevention of accidents at rail-highway grade crossings. Mr. Cox made his proposal at last week's hearing in connection with the Commission's inquiry as to the need for additional safety regulations to prevent such accidents.

The hearing was held in Washington before Examiners Vinskey and Boyd. The inquiry is docketed as No. 33440. It was instituted by the Commission on its own motion, but that action came after unions representing railroad employees had filed petitions seeking such a probe. Several railroads supported these brotherhood petitions (RA, Feb. 20, p. 14). The inquiry, originally limited to crossing accidents involving trucks carrying petroleum products and similar dangerous liquids, was later broadened to include all-train-motor vehicle collisions (RA, Oct. 2, p. 36).

The government-industry advisory group recommended by Mr. Cox would include representatives of these interests: federal agencies, state highway officials, state highway police, railroad and motor carrier associations and labor unions. The set-up would also provide "suitable representation for those engaged in transporting flammable and other hazardous materials." Mr. Cox further spelled out his proposal as follows:

"The group . . . should be headed by a government officer of substantial importance, such as a deputy federal highway administrator of the Department of Commerce. . . . It should have official sanction, either by resolution of Congress or by an executive order of the President. It should be thoroughly representative in its com-

WATCHING WASHINGTON WITH WALTER TAFT

• **SAFETY COMMITTEE PROPOSAL** of the Railway Labor Executives' Association will be the subject of further discussion between representatives of railroad management and RLEA. The conferees will be C. D. Buford, vice-president of the AAR and Harry See, vice-president and national legislative representative of the Brotherhood of Railroad Trainmen.

THAT'S ALL that came out of the informal meeting held Nov. 22 under the auspices of Chairman Hutchinson of the ICC (RA, Nov. 20, p. 10). The Buford-See conference was agreed upon to give Mr. See an opportunity to spell out exactly what the RLEA proposal contemplates.

MANAGEMENT has been wary of the joint-committee idea, presumably because it feels that safety is promoted best by employee participation in safety programs of individual roads. RLEA's approach to the ICC reflects the union's hope for a Commission endorsement which might prod management into going along.

• **NEW ACCIDENT-REPORTING RULES** will become effective Jan. 1. They will comprise the final phase of the comprehensive revision of these regulations which was ordered by the ICC in the aftermath of the Accident Reports Act passed by Congress last year.

THAT ACT was a compromise version of a more drastic bill which had been sponsored by the Railway Labor Executives' Association and opposed by the AAR. The compromise, endorsed by the Commission as well as by RLEA and AAR, left the Commission with discretion to determine what accidents are reportable, but it contemplated amendment of some reporting rules which RLEA didn't like.

FOLLOWING THROUGH promptly to comply with the compromise agreement, the Commission made the major revisions called for effective last Jan. 1. There were two of these substantive changes. One broadened the scope rule to require reporting of all accidents occurring in connection with usual activities of a railroad company. The previous scope rule undertook to confine reportable employee casualties to those relating to railroad operations. The other change made an accident reportable if it disabled an employee for 24 hours. This was 72 hours in the previous rule.

ADDITIONAL REVISIONS, which the present order makes effective next Jan. 1, are designed to simplify reporting procedures. They will reduce the number of report forms from six to three, make cause codes consistent with current terminology, place responsibility for cause coding on the Commission as a means of insuring uniformity in classifying accidents, and eliminate superfluous material.

• **HIGHER FUEL PRICES** of the July-October period were principally responsible for keeping the AAR's quarterly price index on the upgrade. The October index, at 144, was up one-half point from July's 143.5. The latter, influenced principally by a drop in fuel prices, had halted an uptrend which was under way for a year.

THE FUEL-PRICE INDEX rose one point between July and October—from 113.4 to 114.4. Meanwhile, all other commodity-group indexes remained unchanged or rose less than half a point. With fuel prices excluded, the October index was only one-tenth of a point above July's—159.9 compared with 159.8. The indexes are based on mid-year spot prices of the 1947-49 period as 100.

Proposed

position. It should be charged with the responsibility of making direct recommendations to affected federal, state and local highway authorities, enforcement officials, and the appropriate organizations representing railroads, motor carriers, and carriers of hazardous materials.

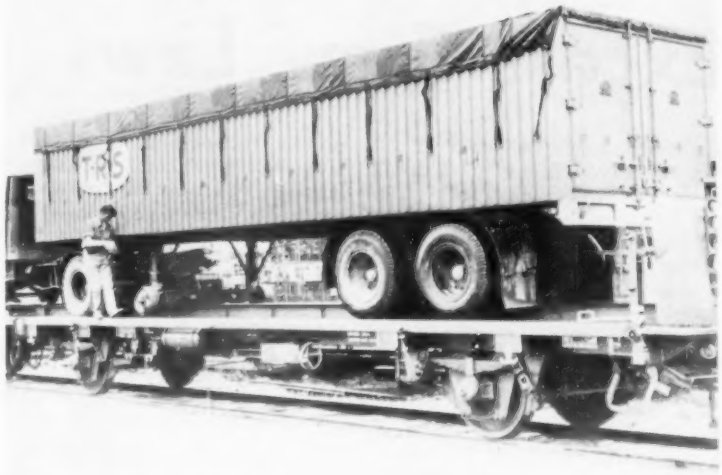
"It should also have the authority to make recommendations to legislative bodies such as state legislatures through the Council of State Governments and the National Committee on Uniform Traffic Laws and Ordnances. It should also have responsibility . . . to make recommendations with respect to standards which would lead to elimination of grade crossings in particular cases, to the installation of specific types of grade crossing protection devices . . . and with respect to closing of particular crossings to heavily loaded commercial vehicles because of steep grades, restricted visibility, and 'other complicating elements in relation to the nature and density of railroad traffic'."

As to his idea that the group should develop "standards for recommendation to state highway departments to determine the categories of railroad crossings requiring certain protection." Mr. Cox thinks this is a job which should be done even if the group is not formed. In that case, he would give this assignment, by legislation to "an appropriate federal agency."

Stricter and more uniform rules requiring the stopping of motor vehicles at grade crossings were also recommended by Mr. Cox. At the same time, however, he would provide for "exempt crossings" where motor vehicles would not have to stop, railroad traffic being light.

"Railroad traffic using such crossings," Mr. Cox said, "should be required to come to a stop and to proceed across the highway only when preceded by a flagman. It is well known there are many crossings at which railroad traffic is extremely limited."

Another Cox recommendation called for fitting heavily-traveled highways with paved lanes in advance of railroad crossings "to permit vehicles which are required to stop to do so outside the lane of normal traffic flow." This proposal was designed to overcome a major objection to the stopping requirement, i.e., the contention that following traffic is exposed to the hazard of rear-end collisions. Such lanes are now in use, Mr. Cox said, adding that "their further installation should be encouraged."



Sweden Chooses the Clejan System

The Swedish State Railroad has chosen the Clejan system for its first piggyback operations. After a study of different TOFC methods, Sweden concluded that the Clejan type "allows for the most rapid loading and, therefore, is the most interesting as far as economies are concerned." Approximately 100 trailers per month are expected to move between Stockholm and the ports of Gothenburg and Halsingborg, where they can be ferried to continental destinations.

MP Rebuilds Passenger Fleet

Missouri Pacific has initiated a program to rebuild "from trucks to roof" every passenger car in its fleet of trains operating throughout the West and Southwest. The work is being done at MP's Sedalia, Mo., shops, which were reopened last August. At present, 45 men are turning out three or four cars per month.

MP President Downing B. Jenks said, "Starting next February, we expect to have 175 men rebuilding cars at the rate of 12 per month." It is expected that the passenger car repair program will take three years to complete.

Mr. Jenks said that MP expects to purchase some 50 new mail and express cars next year. He said, "These two programs should spike rumors that the Missouri Pacific is trying to get out of the passenger business. On the contrary, the Missouri Pacific wants to provide the traveling public with the finest equipment on those trains which they patronize."

The passenger car upgrading program is not included in the $27,000,000 capital improvement program approved by MP's board of directors in November (RA, Nov. 27, p. 33). Under this program, MP plans to acquire some 500 roller-bearing-equipped freight cars and to upgrade its existing freight equipment.

Mr. Jenks said that the freight car repair program is designed to bring the percentage of bad order cars on the MP down from the present 8% to below 3% by next summer. Eleven hundred hopper cars are programmed for rebuilding during the first half of 1962, followed by an upgrading program on box cars. The shops will also equip more cars for special handling of automobiles and parts and work will be done on rehabilitating camp car equipment used by track maintenance forces.

MP's president said that the repair program, which will be undertaken at Sedalia and DeSoto, Mo., and Palestine, Texas, shops, will "tax the capacity of these facilities, necessitating the building of new cars elsewhere." He added that an important feature of the whole program is to "plan the work so as to bring about a stabilization of employment."

MP will also replace 13,600 cast iron freight car wheels with steel wheels in 1962, as the beginning of a program which will take several years to complete.

RRs Renew War on 'Excess Crew' Laws

Railroads operating in New York will make a renewed effort in 1962 to kill "excess crew" laws which they claim result in the wasteful expenditure of more than $12 million a year.

Victor F. Condello, vice chairman and general counsel of the New York State Association of Railroads, announced the repeal drive at a Nov. 28 hearing of the Joint Legislative Committee on Industrial and Labor Conditions in New York.

Mr. Condello noted that repeal of the 48-year-old laws will be sought despite the fact that the association is challenging the constitutionality of the "excess crew" statutes in the courts. The lawsuit was filed in the State Supreme Court in August, but present indications are that it will not come to trial before spring.

The New York Public Service Commission recommended repeal of the laws in 1960. Repeal legislation was introduced this year but got nowhere—partly because, some observers feel, influential legislators were under the impression that all "excess crew" problems would be disposed of by the Presidential Railroad Commission which is investigating management's charges of featherbedding in the railroad industry as a whole.

Actually, as Mr. Condello pointed out last week, any realistic reassignment of train crews resulting from the Presidential Commission's findings would be meaningless in states where excess crewmen are required not only by union contracts but by state law. A total of 16 states now have such laws.

In their legal challenge, the railroads claim that the "excess crew" laws are discriminatory in that they apply to railroads and not to other industries, and that they amount to restraint of interstate commerce.

At last week's legislative hearing, Mr. Condello called the excess crew problem "one of the most perplexing in the labor-relations field."

It began in New York, he said, when the legislature in 1913 laid down laws (applicable to any railroads operating over more than 50 miles in the state) calling for a six-man crew on freight trains of more than 25 cars; a five-man crew on freight trains of 25 cars or less; and a three-man crew on any light engine without a car or cars.

A 1936 amendment added the statutory requirement for an engineer and fireman on locomotives. Another amendment, in 1937, prescribed a minimum five-man crew for all switching and transfer operations.

Mr. Condello said he had "repeatedly" offered to work out with the railroad brotherhoods a plan which would protect affected employees from loss of jobs. But, he said, the brotherhoods "refused to meet with us to work out such a plan to protect the men they represent."

Mr. Condello then reaffirmed the following "unequivocal pledge" which the railroads made to the operating brotherhoods last Feb. 17:

"The member railroads of the New York State Association of Railroads are willing to guarantee that no person who is presently working because of [excess crew laws] shall lose his employment by reason of [their] repeal. . . . This pledge shall remain in effect until 30 days after the Presidential Commission studying the national work-rules dispute has reported its findings and new agreements covering the issue in the dispute are executed.

"If these new labor agreements contain provisions for a gradual elimination of the positions in dispute in the national work rules issues, the member roads will adopt and place into immediate effect these same provisions for all positions no longer mandated by the New York state laws, whether or not these positions were or were not previously required by labor agreements."

History Recorded

The story of how railroads helped develop the West is contained in this set of volumes presented recently by American Railway Development Association President Lyman B. Horton, left, to J. Elmer Monroe, seated, vice president and director of the Bureau of Railway Economics of the Association of American Railroads. Mr. Monroe accepted the set for the AAR library in Washington. The volumes were collected by Arthur W. Large, retired general agricultural agent of the Rock Island.

EARNINGS SLIDE

(*Continued from page 10*)

dential Railroad Commission on the work-rules dispute could trim inflated labor costs—if the unions accept the report, which won't be binding.

Liberalization of present depreciation policies could bring an upsurge in new-equipment orders—if railroads are able to earn enough money to take advantage of any fast-depreciation move.

Meanwhile, in the absence of major legislative reforms, there is no immediate prospect for halting the continuing decline of the railroads' share of total ton-miles. This is indicated by early replies to Railway Age's December Traffic Poll (which will be more fully reported in the issue of Dec. 18/25).

A cross-section of industrial traffic managers were asked to predict how their company's business, total transportation requirements and use of rail service in 1962 would compare with 1961. Of those who have answered to date, 31 said their companies' business, and transportation needs, would be larger next year than this. Eight look for continuance in 1962 of 1961 levels; none anticipate a decline.

But only 23 predict an increase in their use of rail transport. Another 14 said they will use rail service next year to the same extent they did this year, and two said they will use it less. Eight who expect to need more total transportation next year say they will use no more rail service than they did this year; one will use less. One looks for no change in total transport needs but will use less rail service. Only one predicts an increase in relative use of railroads, and then only because of lower rates.

It may add up, in absolute terms, to more total ton-miles by rail—but it also appears to mean another drop in the rails' proportion of the country's total freight traffic.

'Fully Distributed Nonsense'

"I read your Action Page editorial (RA, Nov. 13, p. 42) entitled 'Umbrella or Shillelah'," writes John W. Ingram, senior transportation analyst, Southern Railway, "and I couldn't agree with you more. If railroads are pinned down to fully distributed cost as a 'floor' for their freight rates, they will soon cease to exist as private enterprise."

Mr. Ingram's comments follow:

Dead Hand of the Past—There are three good reasons why fully distributed costs should never be used for railroad pricing decisions. In the first place, fully distributed costs are historic. Therefore, they cannot be used to gage the results of individual future rate actions, unless, of course, such rate actions are pointed toward continuing precisely what has happened in the past.

The point is easy to illustrate. Suppose someone wanted to start a new railroad. He would have to make a rather large investment before any traffic could move. His fully distributed costs would be infinitely great per traffic unit, because he has no traffic units to start with. With fully distributed costs as a floor, he would never be able to quote a rate to move traffic on his new railroad.

If, somehow, he were permitted to start operations without such an impossible floor at the outset, he would still be faced with extremely high fully distributed costs until his traffic volume could be built up. If at any time in the early or other light-traffic years in the career of his railroad, regulators should require him to establish his rates on the floor of high (because of low-volume) costs, he would be in trouble.

Railroads are in that boat today. Many operate with large amounts of idle capacity. Fully distributed costs, in effect, soak the present traffic with the cost of this idle capacity. These abnormally high costs, when erroneously used as a rate floor, prohibit utilization of excess capacity by building a prohibitively high rate wall around it. The assumption, in using fully distributed costs as a rate floor, seems to be that there will always be the same ratio between traffic volume and plant capacity regardless of increases in traffic volume. This is an untenable assumption.

The only thing that is constant in any business is change. We can be sure that, whatever traffic volume is today, it will not be the same in the future. It will either be higher or lower. Consequently, fully distributed costs will not jibe with the rates based upon them, because actual future traffic can hardly be expected to equal the volume on which historic fully distributed costs have been calculated. Rate actions are usually designed to change today's traffic volume for the better. We can, therefore, expect that fully distributed costs will over-estimate future costs if the rate adjustment involved is successful.

Does Heavy Loading Boost Costs?—Secondly, fully distributed costs can never be otherwise than irrational when applied to individual traffic items. That is because the allocating bases used to determine them are irrational. For instance, the allocating bases used in the railroad Form A cost method for allocating constant costs (and hence for determining fully distributed costs), are hundredweight miles and hundredweights.

Essentially then, Form A constant costs are allocated on the basis of weight. This means that a heavily loaded car will receive a greater allocation of constant costs than will a lightly loaded car. The simple fact that a heavily loaded car utilizes railroad capacity much more efficiently than a lightly loaded car seems to have escaped the attention of the cost allocators. If fully distributed costs were used for rate-making purposes, rather severe penalties would be incurred in any program of rate reduction aimed at increasing the car's load. Cars loaded extremely lightly receive almost no allocation of constant costs.

The Pocahontas coal railroads might be well advised to get out of the coal-hauling business if this fully distributed cost theory were accepted. Their heavily loaded coal cars are loaded down with the attribution of high constant costs. Just think of the overhead charges that these roads could save by dropping their coal traffic—according to this fully distributed cost theory. This is, of course, nonsense.

Compulsory Irrationality—Thirdly, in order to arrive at a figure for fully distributed costs, some allocating base must be used. But there can be no agreement among economists, regulators or railroads as to which basis is best, because there is no "proper" allocating base. I can think of at least ten allocating bases which would appear reasonable on the surface, but which would produce vastly different answers.

I am reminded of E. C. Poole's story, about the time he visited an insane asylum and found a man plucking at the air and then making piles of nothing in front of him on his desk. Every few minutes he would take out a pad and pencil and write something down. After watching this mysterious behavior for some time, Mr. Poole asked the keeper what was going on. He was told that the patient was an old railroad cost man who had gone mad allocating constant costs.

If regulators were to insist on fully distributed costs as a price floor, they would in effect be saying that traffic should be allocated among the various modes of transportation according to the whim of the cost analyst in picking a basis for allocating constant costs. Actually, of course, the market place is the only reliable allocator of constant costs. True, total costs must be earned or a company goes under. But there is no economic law or set of objective rules that can tell us how much constant cost should be earned by any unit of production. Only the market place can decide this equitably and accurately.

In short, the case against reliance on fully distributed costs in rate-making can be summed up as follows:

1. Such costs are historic and cannot reflect the result of future actions. This is especially true when the goal is to significantly expand traffic volume and, hence to utilize excess capacity. Surely the effective use of capacity that will otherwise be wasted is a goal that is economically and socially desirable.

2. Such costs are irrational in that, as presently constituted in the Form A method, they promote the disutility of railroad freight car equipment.

3. Fully distributed costs for individual traffic situations cannot be calculated on a rational basis because there is no one acceptable basis for allocating constant costs. Rather there is a large family of allocating bases, each of which produces widely differing results, which are bound to be irrational more often than not when applied to specific situations.

You Ought To Know...

Illinois Central has started a new Chicago-New Orleans freight service, cutting three and a half hours off its fastest present schedule. Two new trains, CN-7 and NC-8, began operating last week on a 28-hour schedule for the 921-mile run, giving overnight service to Memphis and second morning delivery at Chicago and New Orleans.

Elgin, Joliet & Eastern has brought suit in a federal district court against BRT lodge 960, Gary, Ind., for $65,000 damages arising out of an "illegal and unlawful work stoppage." The work stoppage occurred Oct. 25, at EJ&E's Kirk Yard when some 300 yardmen failed to report for duty after a lodge member was suspended from service for 10 days as a disciplinary measure.

B&M will file within about three weeks notice of its intention to eliminate 50% of its commuter service on a system basis, President P. B. McGinnis said last week. If the decline in patronage continues, he added, all commuter service on the road may be expected to end within a year. Six years ago B&M carried 37,000 daily commuters in the Boston area. Following the opening of Interstate Route 93 into Medford three months ago, the number of daily riders dropped to 8,000. When a second tunnel on the highway is opened to take care of peak-hour loads, B&M expects more riders to be diverted, leaving "at most" about 4,000, of whom 1,200 will be B&M employees.

PHOTO CREDITS

p. 32-Eastfoto; p. 35-AAR; p. 39-Sovfoto; p. 42-Underwood & Underwood.

Federal-government guaranty of a $5-million loan for the Lehigh Valley has been approved by the ICC. Proceeds will reimburse the road's treasury for capital expenditures made since Jan. 1, 1957.

A 43% increase in advance reservations on the "Super Chief" in 1961 as compared with 1960 is attributed by Santa Fe President E. S. Marsh to aggressive salesmanship, maintained standards of service, and a willingness to experiment. Reservations on all ATSF trains are up to some degree.

Discontinuance of its Kansas City-Minneapolis passenger service is being sought by the Chicago Great Western. If the ICC approves, only two CGW passenger trains will still be running—13 and 14 operating daily between Omaha and the Twin Cities.

The strike-bound Rutland's management and unions representing the striking employees are considering a proposal by Secretary of Labor Goldberg that the controversy be arbitrated. That's the outcome of last week's Washington conferences which were held in response to Secretary Goldberg's request and at which the National Mediation Board was represented by Robert O. Boyd. Involved is the union's demand for the national wage pattern, and the strike is now nearly two months old. Secretary Goldberg's arbitration proposal includes his offer to select an arbitrator.

Automated rapid transit cars and buses are under consideration by the Chicago Transit Authority. This month the Flxible Co. and Barrett Electronics, Inc., will conduct a joint experiment (at CTA's request) with a self-guided bus on an .8-mile run in Chicago.

New symbol for REA Express, to be applied to all equipment used by the agency, is a large white "X" in a red diamond, with the letters "REA" superimposed. It replaces the old red diamond carrying the words, "Railway Express Agency." The agency changed its name from Railway Express Agency to REA Express in November 1960.

Delivery of 10 new Sleepercoaches (which Budd is converting from roomette cars at a cost of more than $1,000,000) is expected by New York Central in first quarter 1962. NYC expects Pullman-Standard to begin delivery of 53 new commuter coaches next spring.

Two full trainloads of structural and reinforcing steel collected from various points across the country are arriving daily at Great Falls, Mont., for use in construction of the Montana Minuteman missile complex. To prepare and feed this steel out to the 100-plus missile sites, U. S. Steel's American Bridge Division has established a receiving and preparation base at the Milwaukee's Great Falls yard. There, about 150 men work two 10-hr shifts, six days a week, using detailed material flow systems and assembly line techniques specially tailored to the job to be done.

An 85-ft flat car, covered with a plywood and felt case, is being used to ship the 1961 National Community Christmas Tree from Aberdeen, Wash., to Washington, D. C. The 75-ft tree will move over Northern Pacific, Burlington and Baltimore & Ohio.

Repack Period Extended

The present 24 month repack period for cars equipped with journal lubricators has been extended to 30 months by the AAR Mechanical Division. The extended period does not apply to cars now equipped with lubricators from which Conditional Approval and Approved for Test status has been withdrawn. The Mechanical Division urges all roads to place the modified rule in effect immediately on those cars having approved lubricators on which the repack dates are less than 30 months old.

No car owner will be required to accept bills for periodic lubrication work on cars equipped with lubricators on the basis of the 24 month repack period on and after December 15, 1961, unless cars are equipped with lubricators from which approval has been withdrawn. The 1962 Code will cover all rule changes.

Advertisers' Index

Achuff Railway Supply Co. 102
Acme Visible Records, Inc. 107
Ajax Consolidated Company, Southern Electric Co. 74, 75
Alco Products Inc. 12, 13
Aluminium Limited Sales Incorporated 46
American Oil Co., Standard Oil of Indiana 70
American Steel Foundries 98, 99
American Steel and Wire, Div. of USS 106

Baltimore & Ohio Railroad 62
Belmont Hotel 116
Boston & Maine Railroad 84
Brenco Inc. 61
Buckeye Steel Casting Co. 88
Buffalo Brake Beam Co. ..... IFC

Cardwell-Westinghouse Co. 112
Chesapeake & Ohio Co. 86
Chicago, Burlington & Quincy RR. 57
Chicago Railway Equipment Co. 94
Cities Service Oil Co. 31
Cleaver Brooks Company, Boiler Division 113
Colorado Fuel & Iron Corp. 117

Dana Corporation 72
Delaware & Hudson RR Corp. 89
Demp-Nock Company 95
Denver & Rio Grande Western RR 92
Detroit, Toledo & Ironton Railroad 104
Diamond Alkali Co. 47

Edgewater Steel Co. 101
Erman-Howell Div. Lauria Steel & Trading Corp. 127

Fairbanks Morse & Co. 108
Freightmaster (A Division of Halliburton Company) 91

General American Transportation Corp. 60, 69
General Chemical Div., Allied Chemical Corp. 83
General Railway Signal Co. 66, 67
General Steel Industries, Inc. St. Louis Car Co. 11
Graybar Electric Co. Inc. 114
Greenville Steel Car Co. 65, 76
Griffin Wheel Company 30

Hennessy Lubricator Co. 77

International Car Div. 115

Jackson Vibrators, Inc. 6, 21
Journal Box Servicing Corporation 73

Kansas City Southern Lines 50
Kerite Co., Inc., The ..... IBC
Krauss-Maffei AG 87

Linde Company Div. of Union Carbide Corp. 15

Magnus Metal Corp. 18, 19
Matisa Equipment Corp. 80
Miner, Inc., W. H. 8
Minnesota Mining & Mfg. Co. 22, 23
Mobil Oil Company 78, 79
Motorola Communications & Electronics, Inc. 96, 97

National Castings Company 63
New York Central System 120
Norfolk & Western Railway 28, 29
Northern Pacific Railway Company 59

Paragon Bridge & Steel Co. 118, 119
Pittsburgh Plate Glass Co., Industrial Paint Div. 90
Pullman-Standard, Division of Pullman, Inc. 16, 17

Railroad Friction Products Corporation 48, 49
Railroad Rubber Products Co. 3
Railway Educational Bureau 116
Railway Progress Institute 56
REA Express 64

Santa Fe Railway 81
Servo Corporation of America 26, 27
Scullin Steel Co. 93
Sinclair Refining Company 54, 55
Southland Manufacturing Co., Inc. 68
Speaker Sortation Systems, Inc. 103
Speno RR Ballast Co., Inc., Frank 95
Standard Car Truck Co. 85
Standard Railway Equipment Division of Stanray Corp. .. 100
Superior Diesel Filter Co. 105
Symington-Wayne Corp., Symington Division 14

Terminal Railroad Assn. of St. Louis 102
Thrall Car Mfg. Co. 58
Timken Roller Bearing Company, The 24
Turco Products, Inc. ..... BC

Union Asbestos & Rubber Co., Equipment Specialties Div. 71
Union Switch & Signal Div. of Westinghouse Air Brake Co. 4

Waugh Equipment Co. 25
Western Railroad Supply Co., Q & C Div. 103
Westinghouse Air Brake Co. 48, 49
Whitehead & Kales Co. 20

Youngstown Steel Door Co. 110

CLASSIFIED ADVERTISEMENTS

FOR SALE
REBUILT
RAILROAD CARS FOR INTERPLANT USE
GONDOLAS • BOX • FLAT
ERMAN-HOWELL DIVISION
LURIA STEEL & TRADING CORP.
332 South Michigan Avenue
Chicago 4, Illinois
WEbster 9-0500

KEEP BUYING
U.S.
SAVINGS
BONDS

EUROPEAN INFORMATION
Off-duty reading for railroad men —"European Railways" magazine. Quarterly, illustrated, interesting —includes features on East & West Europe. Only $2.50 a year, $4.50 two years or send $1 for 3 sample copies. (Pay by check or Int. Money Order). European Railways, 146 New Cavendish St., London W.1., England.

Looking for a job?
Looking for a man?
use this space
to get reliable leads,
quicker results
EMPLOYMENT OPPORTUNITIES SECTION
Railway Ave., 30 Church St., New York 7, N.Y.

'Soon' May Be Too Late

Americans haven't adjusted themselves, either in the way they think or act, to living in constant peril from enemy action.

The panicky scramble to scoop out millions of flimsy fallout shelters is no answer. Neither is abject surrender—deciding it's "better to be red than dead."

But the folks that are scared are more realistic than those who are going ahead with business as usual—or (more accurately worded) with extravagance as usual.

When a house is on fire, the panicky householder carefully carries a mattress downstairs, while he throws his typewriter out a second-story window. The business-as-usual fellow looks on unconcerned, figuring that the more the damage, the bigger the check he'll get from the insurance company. (It may not work out that way if there are so many fires that the insurance company goes broke.)

The realistic householder will first see to the safety of his family, and then to his most valuable and mobile possessions—but the completely realistic fellow, most likely, will not have a fire to deal with at all, because he will have taken all reasonable precautions against it.

There are three varieties of war that have confronted Americans ever since we failed to use our exclusive possession of atomic weapons, in 1946, to banish war and armaments from the face of the earth—and especially after we neglected to prevent the Russians from stealing our atomic secrets. These varieties are: Cold, Warm, and Hot.

We have not yet learned to wage Cold War effectively, and our slowness to do so shows how we are even less well prepared to go forward to victory in Warm War or all-out Hot War. The fellow who has not applied himself to mastering the game of checkers is scarcely an apt prospect to command the intricacies of chess.

What's needed anyhow? Should we start applying now all the austerity we would have to apply if a really Warm or Hot War should fall down upon us? Of course not. What we do need, though, is to make sure we have ready the means to practice effective austerity, should such austerity ever become unavoidable. What we need first and foremost is rationality and realism. If we use these qualities with vigor, the less pleasant discipline of austerity may not become necessary.

From 1947 to 1960, consumption of petroleum fuel in this country increased 78%. Experience in World War II indicates that present peace-time supplies of petroleum could not be sustained at any such level as at present, in the event of active war. In transportation, the best way to conserve fuel is to use those transportation tools that yield the maximum transportation for the minimum fuel consumption. This means using railroads, to conserve both fuel and manpower, to replace a large part of the long-haul transportation now done by truck, by plane and by private autos.

If railroads are going to take over this huge assignment (as they must if it's going to be done at all), then we must keep railroads in active service in time of peace—and keep them well equipped.

It just so happens that the steps necessary to make railroads ready for their indispensable role as a provider of essential transportation—conserving manpower and fuel in a Hot War—are precisely those things that will enable railroads to make their maximum contribution to victory in the Cold War we're already in.

To make their maximum contribution to winning the Cold War—and for maximum readiness for a Warm or Hot War—railroads are not asking for handouts from the public treasury. Paradoxically, they are asking just the opposite, namely, *they are seeking the privilege of reducing the cost of transportation to the American people.*

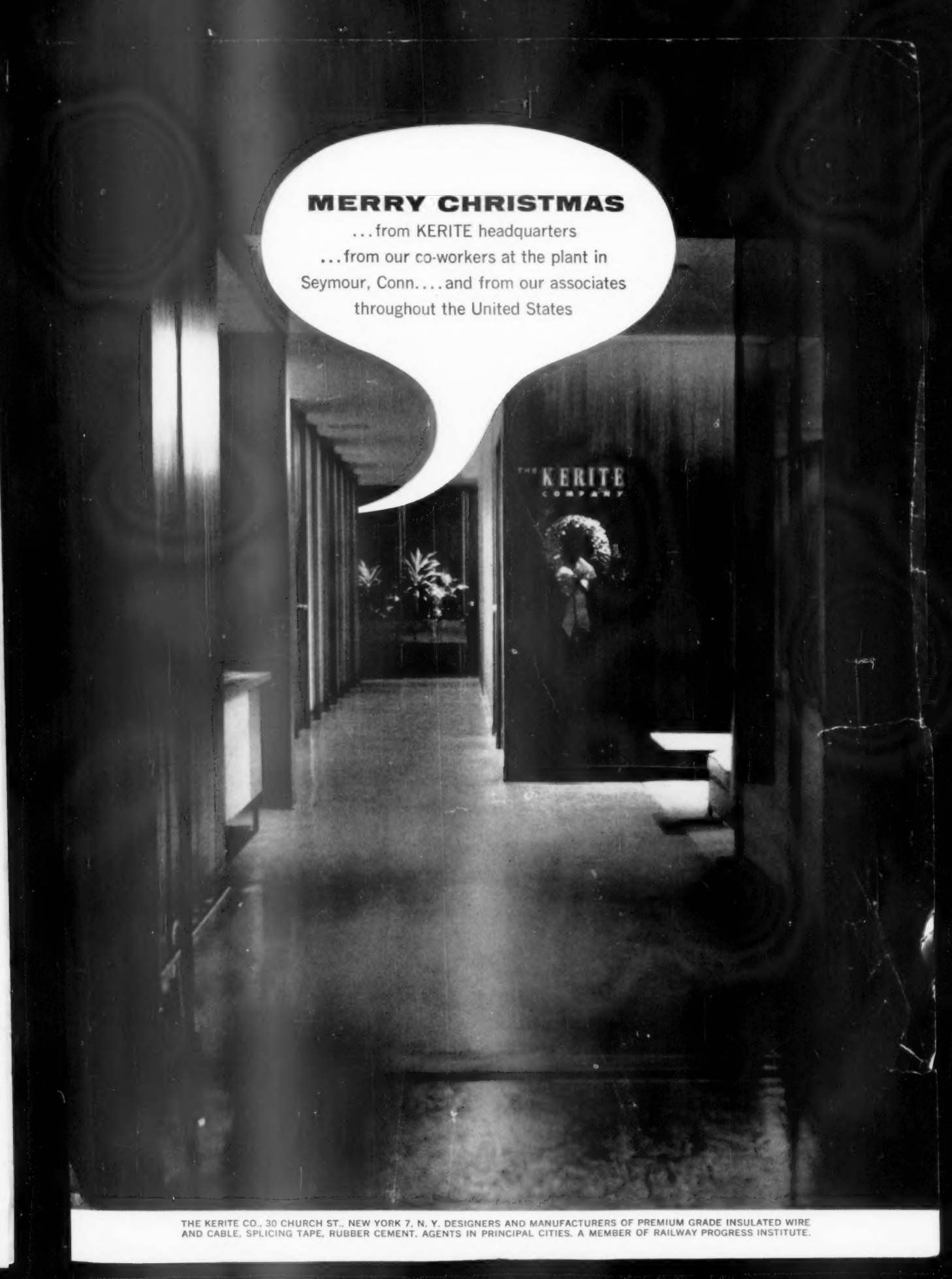
If railroads are permitted to compete freely and equitably for the traffic they can handle most economically, then earnings will be sufficient to give them ample means for keeping their plant and equipment up-to-date.

NO HANDOUTS—JUST TAKE THE CHAINS OFF

In summary, they are asking only for freedom from discriminatory regulation and discriminatory taxes; freedom from competition at the hands of government (in the form of subsidies and promotional efforts in behalf of rival transportation). Beyond this, all they ask is the same right to branch out into other forms of transportation that other forms of transportation already enjoy. These can engage in railroading, if they so desire.

The railroads are trying to bring down the cost of transportation to American industry—which is so large a part of the cost of finished products. Efficiency in transportation is essential in competition in international markets, which is one aspect of the Cold War where the U.S.A. is a long, long way from victory.

All the railroads ask from you, Mr. Citizen, is that you take the chains off them so they can fight for their survival, and for that of you and your family, and of America itself.


MERRY CHRISTMAS
...from KERITE headquarters
...from our co-workers at the plant in
Seymour, Conn....and from our associates
throughout the United States
THE KERITE COMPANY

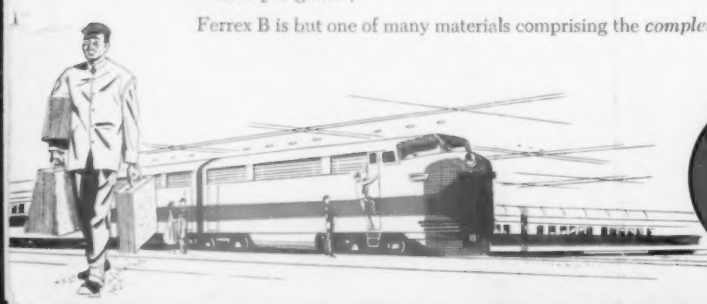
THE KERITE CO., 30 CHURCH ST., NEW YORK 7, N. Y. DESIGNERS AND MANUFACTURERS OF PREMIUM GRADE INSULATED WIRE AND CABLE, SPLICING TAPE, RUBBER CEMENT. AGENTS IN PRINCIPAL CITIES. A MEMBER OF RAILWAY PROGRESS INSTITUTE.

PHOTOGRAPH COURTESY SOUTHERN PACIFIC RAILROAD

For Diesel Overhaul Cleaning...
it's FERREX B by TURCO

When the problem is the stripping of heavy deposits from diesel "A" frames and other parts, diesel operators the nation over have, for years, relied on Turco Ferrex B. The standard and accepted hot tank material for the cleaning of steel diesel parts, Ferrex B *quickly* and *thoroughly* removes the most stubborn soils...performs at peak efficiency over a remarkably long tank life...yet is used at concentrations lower than required by most hot tank cleaning compounds (only four to six ounces per gallon)!

Ferrex B is but one of many materials comprising the *complete* line of Turco compounds engineered *specifically* for railroad cleaning. Included in this line are acid and alkaline exterior cleaners, hot and cold tank cleaners, emulsion cleaners, electrical equipment cleaners, steam cleaners, rust removers and preventives, paint strippers, phosphate pre-paint treatments, dye penetrant flaw location materials, a full line of cleaning equipment, and many, many specialty products. This complete line, plus on-the-spot nationwide Turco technical service, stands as the main reason why, when it comes to *cleaning*, America's leading railroads turn to Turco... *first!*



TURCO PRODUCTS, INC.
Railroad Division
Chemical Processing Compounds
24600 South Main Street, Wilmington, California
FACTORIES: *Rockdale, Ill., Houston, Wilmington, London, Rotterdam, Sydney, Mexico City, Paris, Hamburg, Montreal, Manila, Naha (Okinawa)*
Offices in all Principal Cities